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AUTHOR Schoepke, JoAnn M.
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ABSTRACT

The report presents findings from needs assessment studies conducted in three community college areas to examine the extent to which 161 severely handicapped adults in seven disability groups (orthopedic, visual, hearing, mental retardation, epilepsy, cerebral palsy, and multiple handicapping conditions) have acquired 22 life centered competencies (daily living skills, personal-social skills, and occupational guidance and preparation). In addition to survey results of the disabled individuals, findings from interviews with their relatives, representatives of agencies serving the disabled, community college faculty and staff, and employers are discussed. Data are analyzed for each of 10 research questions, including proficiency levels of each disability group for each competency, employment status, differences between disabled persons and their relatives' perceptions of their competencies, barriers to attaining personal and career goals, and attitudes of community college faculty and area employers toward the disabled. Among findings summarized are that persons with multiple handicaps and persons with mental retardation reported less ability to perform the competencies than other groups; 64% stated that they would like to receive further training; relatives' perceptions tended to confirm the self reports of the disabled concerning career development competencies; and attitudes of others were noted as barriers to goal achievement by the disabled and their relatives. (CL)

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LIFELONG CAREER DEVELOPMENT NEEDS ASSESSMENT STUDY

JoAnn M. Schoepke

WORKING PAPER NO.3
LIFELONG CAREER DEVELOPMENT PROJECT

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Department of Counseling and Personnel Services
College of Education
University of Missouri-Columbia
Columbia, Missouri 65211

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FOREWORD

The University of Missouri-Columbia was awarded a three-year Research and Demonstration Grant from the U.S. Office of Education's Bureau of Education for the Handicapped (BEH) for the period September 1, 1978 - August 31, 1981, to design a Lifelong Career Development Model for Severely Handicapped Individuals. The project, entitled the "Lifelong Career Development (LCD) Project", is an offshoot of a previous BEH project (Project PRICE) which was conducted at this university from 1974-1977. The product results from Project PRICE are now available from the Council for Exceptional Children (CEC) in the form of two publications: Life-Centered Career Education: A Competency - Based Approach (1978) and Trainer's Guide for Life-Centered Career Education (1978).

The LCD Project focuses on the lifelong learning and guidance needs as they relate primarily to the 22 career development competencies identified from Project PRICE as those which are most critical for community functioning. Using the community college as a central coordinating agency, the project has the following objectives.

- To develop a conceptual career development prototype model that can be implemented at a community college to assure and coordinate continuous delivery of services to severely handicapped individuals throughout their lifetime;
- To develop a staff development training program and materials to train various types of community personnel to provide lifelong career development services to severely handicapped individuals;
- To implement and field test the prototype staff development training to determine its applicability for community settings; and
- To implement and field test a comprehensive career development training program for severely handicapped individuals which will effectively meet their lifelong learning needs.

Seven major types of handicapping conditions are being considered in this project: orthopedic, visual, hearing, mental retardation, epilepsy,

cerebral palsy, and multiply handicapped. The following Advisory Committees are giving input and direction: a National Advisory Committee, Community College Advisory Committee, and a University of Missouri Advisory Committee. In addition, each of the three community colleges involved in the project have formed their own local community advising committees.

One of the first major activities of project staff was to study the extent to which the seven disability groups in the three community college areas have acquired the 22 life centered competencies. We were also interested in determining what community services are available to meet the training needs of each of the disability groups in each competency area. The results of this study, combined with input from community college advisors, advising committees, and other advisory committees, will help us ascertain the most appropriate roles for community colleges to undertake in helping community agencies and other groups provide comprehensive lifelong career development services for severely handicapped individuals.

This working paper presents the needs assessment studies which were conducted in the three community college areas with considerable assistance from college and agency personnel. It has been compiled, analyzed, and written by JoAnn Schoepke, Research Associate, with assistance from W. Malcolm Flanagan, Research Consultant, and other project staff. It is hoped that the information contained herein will also provide assistance to other communities, as they attempt to develop and implement services that will better meet the needs of individuals with disabilities.

We are greatful for the assistance given by community colleges and agency personnel in conducting this study. It has reinforced our belief that most persons working on behalf of persons with handicaps are truly devoted to constant evaluation and improvement of services to these individuals. By working closely together, we will be able to close the gap that still exists in our service delivery system so that all persons with disabilities have the opportunity to be productive and successful citizens.

UMC, 223 South Fifth Street
Columbia, MO 65211

Donn E. Brolin
Project Director

Project Staff - University of Missouri

Donn Brolin, Director
Malcolm Flanagan, Research Consultant
Anne Domeck, Training Specialist
JoAnn Schoepke, Research Associate
Joyce Price, Secretary

Coordinators of Cooperating Community Colleges

Mr. Luverne Bierle, Iowa Central Community College, Fort Dodge, Iowa
Ms. Neva Williams, Brainerd Community College, Brainerd, Minnesota
Ms. Camby Gallagher, Meramec Community College, St. Louis, Missouri

Community College Advisors

Dr. Carl Larson, Assistant Superintendent for Curriculum & Instruction, Iowa Central Community College, Fort Dodge, Iowa

Dr. Curt Murton, President, Brainerd Community College, Brainerd, Minnesota

Dr. Michael Rooney, Director of Counseling, St. Louis Community College at Meramec, St. Louis, Missouri

Project Advisors - University of Missouri

Dr. Gary Fox, Higher and Adult Education
Mr. Gerald Hitzhusen, Recreation and Park Administration
Dr. Earl Moore, Counseling and Personnel Services

National Advisory Committee

Mr. Miles Beachboard, Director, Programs for the Disadvantaged & Handicapped, State Department of Education, Jefferson City, Missouri

Dr. Frank Bowe, Executive Director, American Coalition of Citizens with Disabilities, Washington, D.C.

Mr. Charles Freeman, Vending Facility Program Specialist, Rehabilitation Services Administration, Washington, D.C.

Dr. Robert Huskey, Assistant Superintendent for Speech & Language & Career Education, Special School District of St. Louis County, St. Louis, Missouri

Melville J. Appell, Project Officer
Bureau of Education for the Handicapped

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The LCD Staff would like to thank the community college advisors and coordinators as well as the interviewers at each of the three sites for all of the efforts expended in developing the needs assessment survey and collecting data for this study.

JMS

I. INTRODUCTION

The Lifelong Career Development (LCD) Project for Severely Handicapped Individuals focuses on the needs of handicapped persons and the fact that integrated programs to provide lifelong career development services for handicapped do not now exist to fill all of these needs. The Rehabilitation Act of 1973 and its 1974 and 1978 Amendments, the Education for all Handicapped Children Act, the Education Amendments of 1976 (Vocational Education) and the Lifelong Learning Act of 1976 make it imperative that programs be developed to meet these needs. In order to plan wisely, the LCD staff completed a needs assessment study in three communities where programs are to be implemented and field tested. The purpose of this working paper is to present the results of this needs assessment.

Lifelong learning is based on the premise that both individuals and society change. Individuals proceed through various developmental stages throughout the life span and face unique problems requiring new learning at each stage. The rapid changes taking place in society intensify the need for new learning opportunities. The concept of career development incorporates the idea of change and the many roles, settings and events individuals encounter throughout life. Career education has been defined as "the process of systematically coordinating all school, family and community components to facilitate each individual's potential for economic, social and personal fulfillment" (Brolin, 1978, p.4). This concept serves as a basis for the LCD Project through which individuals from a variety of settings will be trained to provide specific opportunities for persons with disabilities to learn essential life career development competencies, which are the skills and behaviors necessary for personal growth and optimal functioning. The lifelong career development competencies (Table 1), which will be the focus for the LCD Project, have been deemed those which individuals need to possess if they are to achieve community living and vocational success in adulthood (Brolin, 1978). The competencies which fall under the three major domains of daily living skills, personal-social

Table 1

Lifelong Career Development Competencies[1]

Domain: Daily Living Skills

Competency
1. Managing Family Finances
2. Selecting, Managing, and Maintaining a Home
3. Caring for Personal Needs
4. Family Living and Raising Children
5. Planning, Buying, and Preparing Food
6. Buying and Caring for Clothing
7. Engaging in Civic Activities
8. Utilizing Recreation and Leisure
9. Getting Around the Community (Mobility)

Domain: Personal-Social Skills

Competency
10. Achieving Self Awareness
11. Acquiring Self-Confidence
12. Achieving Socially Responsible Behavior
13. Maintaining Good Interpersonal Relationships
14. Achieving Independence and Interdependence
15. Achieving Problem-Solving Skills
16. Communicating Adequately With Others

Domain: Occupational Guidance and Preparation

Competency
17. Knowing and Exploring Occupational Possibilities
18. Selecting and Planning Occupational Choices
19. Exhibiting Appropriate Work Habits and Behaviors
20. Physical-Manual Skills
21. Obtaining a Specific Occupational Skill
22. Seeking, Securing and Maintaining Employment

[1]Brolin, D. (Ed.). Life centered career education: A competency based approach. Reston, Virginia: Council for Exceptional Children, 1978, p.10.

skills, and occupational guidance and preparation, are also subdivided into 118 subcompetencies (see Appendix A).

The ability to perform each of these competencies contributes to the adjustment of all individuals; however, persons with disabilities are often in a disadvantageous position and unable to function as fully as possible because opportunities to learn these skills have not been offered or have been provided in ways that did not foster optimal learning. Programs for individuals with severe disabilities, especially adults, are short, fragmented, limited in focus, or inadequately funded, and do not alleviate the "one-down" position such persons hold in our society. These issues are further compounded by both attitudinal and architectural barriers.

The literature as reviewed by Flanagan and Schoepke (1978) attests to the fact that employment rates for persons with disabilities are far lower than for non-disabled persons. While saleable work skills are essential for employment, the factors relating to overall personal adjustment are just as important. Long-term vocational adjustment is unlikely if the individual experiences failure or adjustment problems related to interpersonal skills, self management, utilization of leisure, family life, and other areas that are essential for full, satisfying, independent living.

These factors combined with the results of the LCD needs assessment study indicate the necessity for training personnel to work with disabled persons on career development competencies. The LCD Project will devise training and resource materials for such personnel with benefits accruing to those who are trained, their agencies, programs, and associates, and ultimately to the persons with severe disabilities themselves who will be recipients of appropriate and essential learning opportunities.

II. OVERVIEW OF STUDY

The LCD needs assessment survey was devised and conducted to ascertain the career development competency levels and learning needs of those individuals with seven types of disabling conditions: 1) cerebral palsy, 2) epilepsy, 3) hearing impairment, 4) mental retardation, 5) multiple handicaps, 6) orthopedic handicaps, and 7) visual impairment. It was also essential to determine whether or not opportunities to meet learning needs were available to individuals with these disabilities and if not, how the LCD Project could best proceed in the development of a program that would do so.

To meet realistically the lifelong learning and career development needs of persons with these disabilities, a central agency was identified which could assist already existing agencies to coordinate their efforts and provide direct services when they are lacking. The community college, as such as agency, offers counseling, testing, career development services, adult basic education programs, remedial and developmental programs in areas of communication and mathematical skills, vocational and technical programs, short-term and associate degree level programs, academic programs and non-credit popular interest courses. As an agency or institution, the community college is within commuting distance of most citizens in its district, commands a positive image in the community, and opens its doors to students of all ages and backgrounds, including both day and evening students and full-time and part-time students. Vocational/technical programs may be offered in the community college and are generally based on needs assessment surveys of the immediate and surrounding communities of which they are a part. Many community colleges have developed wide-ranging outreach programs including special programs and personnel for disadvantaged and handicapped individuals. In addition, most community colleges are housed in fairly new facilities with fewer architectural barriers than older, more established institutions.

With the identification of the community college as its central agency, the LCD Project developed a cooperative relationship with three community colleges, each in a unique geographical area. These three agencies have become the field sites for the LCD project and were the areas in which the needs assessment survey was conducted. The community colleges themselves will benefit through their involvement in LCD by becoming able to serve an even greater population by an increased scope and flexibility of services, increased visibility and student enrollments, and increased interaction, communication and cooperation with agencies, professionals, and individuals within their communities. In addition, access for funding to maintain and further develop community college services, programs, and faculty/staff may also be enhanced since such funding is likely to be contingent upon past performance and measurable results.

Data for the needs assessment study were gathered from persons with disabilities, relatives of those persons, and community college, agency, and area business personnel at each of the three field sites during January-March 1979. While ascertaining the competency attainment and learning needs of individuals in the seven disability groups and indicating what competency-related services are not available to each group, survey results also reveal the roles that the community college and others need to assume if all competencies are to be taught to persons with severe disabilities. This survey data also serves as information to be used by the community college in a referral role when working with handicapped persons and identifies training needs and preferences of community college and agency personnel.

Research Questions

The LCD needs assessment survey was designed to gather the information necessary to answer the following questions.

1. What are the proficiency levels of each disability group for each competency?

2. Do differences or commonalities exist among the competency levels of the seven disability groups? What differences exist due to age or sex?

3. What is the employment status of each disability group? Are employed individuals in sheltered or competitive work settings? What

types of jobs are being held by those who are currently working?

4. What proportion of individuals in each disability group would like to receive training from appropriate community agencies? What areas seem appropriate for training?

5. Is there a significant difference between the persons with disabilities' perceptions of their competencies and their relatives' perceptions of those competencies?

6. What barriers to attaining personal and career goals are perceived by persons with disabilities and their relatives?

7. Are services pertinent to all competencies for all disability groups currently available? Do gaps exist between needed services and available services?

8. What types of assistance do local agencies need in order to provide career development services to individuals possessing disabilities?

9. What types of training do local agencies believe will be most effective and appropriate in enabling them to provide career development services?

10. What attitudes do community college faculty and staff and area employers hold toward persons with disabilities?

These questions formed the core for the needs assessment survey; the answers provide the basis for LCD training programs and materials.

III. METHODOLOGY

The research questions noted in Section II are of primary concern to the overall development of the Lifelong Career Development Project; these questions provide the means to confirm what is believed to be a disadvantageous position of persons with disabilities in society relevant to lifelong learning needs. The population sample, research instruments, data gathering procedures, and statistical procedures used to analyze the data are described in this section.

Population Samples

The individual respondents for this study came from five separate populations: 1) persons whose disabilities are one of those chosen as the focus for this project, 2) relatives of those persons, primarily spouses, parents, or siblings, 3) representatives of agencies that serve persons with disabilities, 4) faculty and staff from the community colleges and 5) employers from businesses and industry in each of the three communities. The three field sites from which the samples were drawn were chosen because of their diversity.

Brainerd Community College is located in Brainerd, Minnesota, a rural community of approximately 12,000. The college, which has an enrollment of 600, offers a number of complete two-year curricula as well as coursework designed for transfer to a four-year college. Brainerd offers community services programs to meet the educational, recreational and cultural needs of the community including evening college courses and continuing education units, workshops, community information and counseling services.

Iowa Central Community College is located in Fort Dodge, Iowa, a community of 35,000 in a rural, agricultural area. Iowa Central Community College, with an enrollment of approximately 2,500, is one of the 15 merged area community colleges in Iowa and serves a nine-county area. Two hundred fifty full-time and 25 part-time professionals staff the college's four

basic divisions: Arts & Science, Vocational-Technical, Community Education and Secondary Education.

St. Louis Community College at Meramec, is one of three community colleges serving the residents of the St. Louis Metropolitan area. The programs at Meramec can be classified in four categories: College and University Parallel Curricula for transfer credit, Career Curricula having an occupational orientation, Developmental Courses for remedial work, and Community Service Courses for continuing education.

Each of these field sites organized community advising committees and designated a local campus coordinator to facilitate the survey.

Persons with Disabilities

Those individuals chosen to participate in the survey had disabling conditions that met the operational definitions determined by LCD staff. Each disability was defined as follows:

Blindness and visual impairment: visual acuity not greater than 20/200 in the better eye with correction or normal central visual acuity (20/20) but whose field of vision is limited to 20 degrees or less;

Deafness and hard of hearing: current capacity to hear is 50 or more decibels (dB) loss;

Mental Retardation: general intellectual functioning measured between 40 and 70 on an individual intelligence test (Wechsler or Stanford Binet), accompanied by deficits in adaptive behavior, and occurring in the development years;

Cerebral Palsy: diagnosis by a neurologist and any of the combinations of symptoms of brain damage classified by medical authorities as cerebral palsy and occurring in the developmental period of the person's life;

Epilepsy: diagnosis by a neurologist as an abnormal discharge of electrical energy in the brain resulting in the pattern of symptoms classified by medical authorities as epilepsy;

Orthopedic handicapped: a loss of a limb or a 50 per cent loss of use of a limb as judged by medical/paramedical authorities;

Multiple handicapped: more than one disabling condition neither of which can easily be identified as primary and the other(s) as secondary.

The sample of persons with disabilities was drawn from the caseloads of area agency personnel, from the community college itself, and the community

at large through word of mouth and media coverage. LCD staff projected surveying 420 disabled individuals, 20 from each disability group on each campus. This number was not met because of several reasons including the fact that interviewers were unable to locate large numbers of individuals in some disability groups and the administration procedure took longer than the anticipated hour and many interviewers were unable to devote large blocks of time to the process. In addition, approximately 20 questionnaires were returned to LCD staff after the established cut-off date and eight questionnaires were not useable because the disabling conditions did not meet LCD operational definitions.

One hundred sixty-one persons with disabilities were surveyed (see Table 2). The mean age of this sample was 28 years, with males and females almost equally represented. When age group comparisons were made, subjects were divided into two groups, those 25 years old or less and those at least 26 years old.

Table 2

Distribution of Persons with Disabilities and Relatives of Those Persons Across Groups

Disability Group	Disabled Persons (n)	Relatives (n)
Cerebral Palsy	28	24
Epilepsy	9	1
Hearing Impairment	19	17
Mental Retardation	33	22
Multiple Handicap	18	15
Orthopedic Handicap	38	18
Visual Impairment	16	7
Total	161	104

Relatives of Persons with Disabilities

LCD staff projected interviewing 420 relatives of persons with disabilities, 20 for each disability group at each campus. As in the case of the persons with disabilities, this number was not met for similar reasons. Ten questionnaires were returned post-dead-line and ten question-

naires did not represent the disability groups. In addition, some relatives were unavailable, some did not wish to participate, and some persons with disabilities volunteered to participate but did not wish to involve a relative. One hundred and four relatives were interviewed (see Table 2).

Agency Representatives

Representatives of the agencies that serve the disabled at the three sites comprised the third sample. The administrator, supervisor, or director of forty agencies responded to the Form C questionnaire which was devised to determine the career development services currently being offered to persons with disabilities. Several questionnaires were returned after the deadline and were not included in the data analysis. The information provided on these questionnaires, however, will be utilized by the community college LCD coordinators prior to training and development of programs. Twelve to fourteen questionnaires were returned by each site. A wide variety of agencies participated including the following.

Sheltered employment agencies
Day activities centers
Vocational rehabilitation offices
The community college
School districts
County health services
Vocational-technical schools
Employment/job services
Departments of social services
Family and children's services
Rehabilitation agencies
Easter Seal Society
Goodwill
Area mental health centers

Agencies and projects with a concentrated focus on certain disability groups such as bureaus for the blind, comprehensive epilepsy programs, United Cerebral Palsy, and hearing and speech centers were also represented.

Community College Faculty and Staff

The fourth sample was drawn from the population of community college faculty and staff at the three campuses. Sixty-two persons completed an instrument designed to determine their attitudes toward persons with disabilities.

Employers for Business and Industry

The fifth sample was drawn from the population of employers from the three communities. Fifty-six employees completed the same instrument administered to community college faculty and staff.

Community college personnel and area employers, such as those sampled, will be involved with individuals with disabilities throughout the course of the LCD Project, and their attitudes are of primary importance. Existing attitudes could enhance or detract from the efforts of the LCD Project. Materials to increase positive attitudes will be included within LCD training materials. The amount of time devoted to this segment, however, will depend upon current attitudes found in this study.

Instrumentation

Four separate but related instruments were used to gather data from the above-mentioned groups. Copies of all instruments can be found in Appendices B through D. Forms A, B and C, described below, were developed by the LCD project staff with recommendations and contributions from the University of Missouri-Columbia LCD Advisory Committee and the LCD Coordinators and Community College Advising Committees. A major portion of each of these questionnaires was comprised of the competencies and subcompetencies identified through Project PRICE and adapted to cover skills essential throughout the lifespan. The completed questionnaires were reviewed by various individuals with disabilities prior to finalization.

The Disabled Persons Questionnaire (Form A), (Appendix B), was made up of two parts: The first section requested demographic data and posed a series of open-ended questions related to employment, services received, desire for further training, and perceived barriers to goal attainment. The second part was derived from the 22 competencies and was presented in a card sort format. One hundred eighteen subcompetency/skill statements comprised the card sort to determine the self-reported skill level of each

individual. Each person reported "able to do (the subcompetency) well", "able to do partially", "not able to do at all", "does not apply to me" or "do not comprehend" for each of the 118 statements. The instrument was administered on a one-to-one basis with interviewers recording subcompetency responses on a computer scan sheet and open-ended responses on the questionnaire.

The Relative's Questionnaire (Form B), (Appendix C), was set up and administered in two parts in a manner parallel to the Disabled Person's Questionnaire (Form A). Form B was developed to ascertain the relative's perception of the disabled person's competency level and provide a basis for comparison with the disabled person's self perception.

The Agency Questionnaire (Form C), (Appendix D), was designed so that each agency representative would indicate which of the seven disability groups were being served by the agency and what services, training, or funding pertinent to each of the 118 subcompetencies was provided for persons with disabilities. This questionnaire was administered to determine career development voids and inadequacies. Analysis was done by calculating frequency distributions. In addition, agencies' representatives were asked to indicate and prioritize the types of assistance the agency and staff need in order to provide further career development services to individuals with disabilities. Since the LCD project anticipates the training of community college and agency personnel, representatives were asked to indicate the most appropriate types of inservice training.

The Attitudes Toward Disabled Persons Scale (B) developed by Yuker, Block and Younng (1970) was selected as Form D, (Appendix E), for the needs assessment survey. This scale was developed to measure the perceived differences between disabled and non-disabled persons and was administered to 62 community college faculty and staff and 56 employers at the three sites. Scoring was done according to procedures provided in the test manual; means were calculated and comparisons were made by t-test and Anova procedures.

Data Collection

The data gathering process began with training sessions at each campus to set up logistical procedures for the assessment survey with the LCD campus coordinator, train interviewers in the administration of the instru-

ments, and disseminate materials. Interviewers included the LCD coordinators, agency personnel, and community college students who received classroom work and college credit for participation. Throughout the process, the LCD campus coordinator and LCD staff were available to answer questions, clarify procedures, and arrange for the receipt of data. A Manual of Procedures for Administration was written and made available to campus coordinators in order to provide assistance to the local interviewers.

Reports from LCD campus coordinators revealed a wide range of reactions from interviewers and survey participants in regard to the assessment questionnaires and the objectives of the LCD Project. Some interviewers wished to retain the card sort to use in working with clients; some reported gaining insight into family dynamics with implications for the person with a disability; others were discouraged by the time required for the process. Reactions from subjects tended to be positive with several parents and interested others requesting information about results of the survey and offering support.

Data Analysis-Statistical Procedures

Data gathered through the LCD needs assessment survey provide both generalized and specific information regarding the needs of persons in the seven disability groups.

The competency levels of the seven disability groups were compared by calculating mean scores and performing analysis of variance procedures. Comparisons between disability groups and relatives were done in the same manner. The level of statistical significance chosen was .05.

Mean scores for each competency were calculated by assigning weights to each response choice for each of the subcompetencies. The "able to do well" response was weighted one, "able to do partially" weighted two, and "not able to do at all" weighted three; the last response choices "does not apply" and "do not comprehend" were not included in mean scores. Under this procedure, the lower the mean score, the more the individual or group reports being able to perform the competency. The LCD staff made an arbitrary decision that competency mean scores which are equal to or greater than 1.50, that is, closer to "partially able to do" than "able to do well", are indicative of deficiencies that may be labeled priority learning needs.

Competency scores are likely to be somewhat inflated for several reasons. Responses are subjective self reports and a tendency may exist to report oneself as being more able to perform the competencies than is actually the case. Responses from relatives were calculated in the same manner and thus may also be inflated. There was opportunity for both groups to choose "does not apply" when "not able to do" would have been a more appropriate response. An example of such an incident would be a mother and son with a disability who both responded "does not apply" to skills that have been traditionally assigned to female roles. In addition, an individual who may never have had the expectation of being employable may have responded "does not apply" rather than "not able to do" to work-related activities.

The responses to the open-ended questions on Forms A and B were visually examined, categorized and counted or tabulated by computer to develop the various percentages reported in this study. The information gathered on Form C, number of groups served and subcompetency services provided, was analyzed by frequency counts from which percentages were calculated. Frequency counts and ranks were used to determine needs for agency assistance and training preferences. The scores on the Attitudes Toward Disabled Persons scale were calculated as were the mean scores for each group. Comparisons of groups on each campus to determine differences were performed by t-test. Cross-campus comparisons to determine differences were performed by analysis of variance procedures.

IV. RESULTS

Findings of the needs assessment survey have been organized to provide specific answers to the research questions posed. In most cases, results are shown for total respondents rather than by campus due to the small numbers in some disability groups at various campuses.

Research Question #1

What are the proficiency levels of each disability group for each competency?

Table 3 represents the group means for each competency in rank order; they are presented from those the group as a whole is less able to do to those the group is more able to do. The number in parentheses indicates the competency; the key at the left of the table references the specific competency in abbreviated form.

Competency means fell in the range between "able to do well" (score of 1) and "able to do partially" (score of 2). The data have been organized for each disability group to determine the placement of priorities for learning opportunities. Those competencies each group did least well are identified as having a mean score equal to or greater than 1.50. The number of competencies in this category varied from group to group as noted by the horizontal lines on Table 3. This information is presented in summary form in Table 4.

Groups with visual and hearing impairment each have one competency in the category labeled priority needs while the epilepsy group has three. Visually impaired individuals need opportunities to develop skills in the area of buying and caring for clothing; those with hearing impairments need opportunities to develop skills relevant to managing family finances. Individuals with epilepsy report lesser ability in the areas of buying and preparing food, acquiring self confidence, and enriching family living and raising children.

Table 3

Mean Scores on Competencies by Disability Groups
Ranked from Less Able (top) to More Able (bottom) Within Groups

Key		Cerebral Palsy	Epilepsy	Hearing Impairment	Mental Retardation	Multiple Handicap	Orthopedic Handicap	Visual Impairment
1	finances	2.09(6)	1.76(5)	1.57(1)	2.00(4)	1.84(7)	1.61(6)	1.65(6)
2	home	2.06(2)	1.56(11)	1.48(4)	1.91(17)	1.70(1)	1.58(2)	1.49(9)
3	personal care	1.88(9)	1.50(4)	1.41(2)	1.90(22)	1.67(6)	1.53(11)	1.48(11)
4	family	1.58(5)	1.42(17)	1.36(16)	1.89(18)	1.64(2)	1.52(17)	1.46(1)
5	food	1.55(1)	1.41(20)	1.30(11)	1.89(1)	1.57(18)	1.48(4)	1.36(22)
6	clothing	1.49(7)	1.38(16)	1.30(17)	1.83(9)	1.57(11)	1.48(9)	1.33(18)
7	civic activities	1.44(17)	1.35(18)	1.28(13)	1.78(7)	1.55(9)	1.46(18)	1.32(16)
8	recreation	1.44(22)	1.34(8)	1.27(7)	1.76(2)	1.53(4)	1.45(1)	1.31(17)
9	mobility	1.43(11)	1.33(1)	1.27(15)	1.75(6)	1.49(5)	1.40(20)	1.30(4)
10	self awareness	1.41(20)	1.31(15)	1.27(18)	1.72(15)	1.40(16)	1.37(5)	1.29(3)
11	self confidence	1.41(4)	1.30(3)	1.26(14)	1.68(16)	1.40(17)	1.35(8)	1.28(20)
12	social behavior	1.38(16)	1.30(22)	1.23(8)	1.68(20)	1.38(14)	1.35(14)	1.27(2)
13	interpersonal relationships	1.37(18)	1.28(2)	1.22(10)	1.65(10)	1.36(10)	1.34(15)	1.26(8)
14	independence	1.31(8)	1.28(6)	1.21(20)	1.62(11)	1.34(12)	1.34(22)	1.22(13)
15	problem solving	1.31(3)	1.27(19)	1.21(12)	1.60(5)	1.32(20)	1.33(7)	1.21(10)
16	communication	1.29(14)	1.23(14)	1.19(22)	1.60(14)	1.32(13)	1.29(3)	1.20(14)
17	occupational possibilities	1.21(12)	1.20(7)	1.18(3)	1.59(8)	1.29(3)	1.27(16)	1.19(5)
18	occupational choices	1.19(10)	1.19(13)	1.17(9)	1.51(3)	1.28(8)	1.25(10)	1.17(7)
19	work habits	1.18(15)	1.17(9)	1.16(5)	1.48(12)	1.26(19)	1.21(13)	1.17(15)
20	physical-manual skills	1.18(19)	1.16(10)	1.16(6)	1.45(19)	1.25(22)	1.20(12)	1.13(19)
22	maintain employment	1.13(13)	1.13(12)	1.10(19)	1.40(13)	1.23(15)	1.15(19)	1.11(12)

Less able ↓ More able

• Competency 21, Obtaining a Specific Occupational Skill, was not assessed within this survey, LCD staff recognized that the process of obtaining a specific occupational skill is unique for each individual.

Table 4

Major Learning Deficiencies as Rated by Groups

Disability Group	Competencies (number and name)
Cerebral Palsy	6 clothing
	2 home
	9 mobility
	5 food
	1 finances
Epilepsy	5 food
	11 self confidence
	4 family
Hearing Impairment	1 finances
Mental Retardation	4 family
	17 occupational possibilities
	22 personal care
	18 occupational choices
	1 finances
	9 mobility
	7 civic activities
	2 home
	6 clothing
	15 problem solving
	16 communication
	20 social behavior
	10 self awareness
	11 self confidence
	5 food
	14 independence
	8 recreation
	3 personal care
Multiple Handicaps	7 civic activities
	1 finances
	6 clothing
	2 home
	18 occupational choices
	11 self confidence
	9 mobility
	4 family
Orthopedic Handicaps	6 clothing
	2 home
	11 self confidence
	17 occupational possibilities
Visual Impairment	6 clothing

Individuals with orthopedic handicaps indicate lesser ability in the areas of buying and caring for clothing, selecting, managing and maintaining a home, acquiring self confidence, and knowing and exploring occupational possibilities. Those respondents in the cerebral palsy group report buying and caring for clothing, selecting, managing and maintaining a home, mobility, buying and preparing food, and managing family finances as areas of least ability.

Multiple handicapped individuals report eight competencies as areas of ability. These competencies include engaging in civic activities, managing family finances, buying and caring for clothing, selecting, managing and maintaining a home, selecting and planning occupational choices, acquiring self confidence, getting around the community (mobility), enriching family living and raising children.

Persons with mental retardation (mild to moderate retardation) report in eighteen competency areas. The reader is referred to Table 3 for this list. The means of the remaining three competencies also fall close to 1.50, the arbitrary cut-off score.

Research Question #2

Do commonalities or differences exist among the competency levels of the seven disability groups? What differences exist due to age or sex?

Comparison by Disability Groups

Additional analysis of the data presented in Table 3 indicates that the disability groups report some common deficiencies. A frequency count of the six competencies (Table 5) which each group reports being less able to perform, that is, the top six of each list, indicates that five of the seven groups need opportunities to develop skills relating to managing family finances (#1) and acquiring self confidence (#11). Four of the seven groups also report needs in the areas of selecting, managing and maintaining a home (#2), enriching family living and raising children (#4), buying and caring for clothing (#6), mobility (#9), and knowing occupational possibilities (#17). It should be noted that five of these seven competencies fall in the domain of daily living skills.

Table 5

Common Learning Needs of Disability Groups

Competencies	Disability Groups						
	Cerebral Palsy	Epilepsy	Hearing Impairment	Mental Retardation	Multiple Handicap	Orthopedic Handicap	Visual Impairment
finances (#1)	X		X	X	X		X
home (#2)	X		X		X	X	
family (#4)		X	X	X		X	
clothing (#6)	X				X	X	X
mobility (#9)	X			X		X	X
self confidence (#11)		X	X		X	X	X
occupational possibilities (#17)		X	X	X		X	

Appendix F, Differences of Disability Groups on Competencies, presents a ranking of the seven groups for each competency. Groups are presented on a horizontal continuum with groups on the left reporting they are less able to perform the competency than those groups on the right. Scores that represent the perceptions of the relatives are provided for purpose of comparison. Differences between the perceptions of persons with disabilities and their relatives are discussed under Research Question #5.

Statistically significant differences (alpha .05) were found among the groups for the following 17 competencies. These competencies are also noted by asterisk in Appendix F.

finances (#1)
home (#2)
family (#4)
food (#5)
clothing (#6)
civic activities (#7)
recreation (#8)

mobility (#9)
self awareness (#10)
social behavior (#12)
independence (#14)
problem solving (#15)
communication (#16)
occupational possibilities (#17)
occupational choices (#18)
work habits (#19)
maintain employment (#22)

A tabulation of the frequency with which each group appeared in the four left columns of Appendix F indicates that those individuals with disabilities that are likely to be more severe report being less able to perform the competencies. That is, those that appeared most frequently on the left end of the continuum were the multiple handicap, orthopedic handicap, cerebral palsy, and mental retardation groups.

Comparison of Age Groups

Competency means were compared by age groups; differentiations were made by dividing respondents into those who are 25 years old or less and those who are at least 26 years old. Statistically significant differences (.05) were found for four competencies:

Managing family finances (#1)
Caring for personal needs (#3)
Family living and raising children (#4)
Engaging in civic activities (#7)

In all four cases differences were in the direction of the older group reporting being more able to perform the competencies.

Comparison by Sex

When comparing competency scores by sex the following differences were found at the .05 level of statistical significance.

Buying and caring for clothing (#6) (males less able)
Engaging in civic activities (#7) (females less able)
Utilizing recreation and leisure (#8) (females less able)
Knowing and exploring occupational possibilities (#17) (females less able).

Research Question #3

What is the employment status of each disability group? Are employed individuals in sheltered or competitive work settings? What types of jobs are being held by those who are currently working?

Data pertaining to the employment status of persons with disabilities were examined and hand tabulated. Thirty-five percent (56) of the persons surveyed are currently employed; eleven percent are currently in school or training programs. Table 6 presents the breakdown by disability group.

Of the 56 individuals who are currently employed, eight are in sheltered work settings. These eight include seven individuals with mental retardation and one individual with a multiple handicap.

Table 6

Employment Status of Disabled Persons

Disability Group	n	% Working	% in School	% Other
Cerebral Palsy	28	21	7	71
Epilepsy	9	78	11	11
Hearing Impairment	19	42	32	26
Mental Retardation	33	64	3	33
Multiple Handicap	18	11	0	89
Orthopedic Handicap	38	18	8	74
Visual Impairment	16	31	31	38
Totals	161	35	11	54

The three groups with the highest percentages of individuals in the "other" category, that is, those who are neither working nor in school, are also groups that report being less able to perform the career development competencies. They report the lowest percentages for employment. These three groups include individuals with multiple handicaps, orthopedic handicaps, and cerebral palsy. The majority of persons with hearing impairment, visual impairment, and epilepsy are involved in work or school. Individuals with epilepsy report the highest employment rate, 78 percent, though this statistic is based on a very small sample size (9). While the

percentage of mentally retarded individuals who are employed is fairly high, this group reported a great number of needs for the competencies, that is, competency means equal to or greater than 1.50. One-third of those who are employed in this group are in sheltered settings.

The types of jobs being held by disabled persons surveyed are diverse and range from work requiring a significant amount of training, education skill (registered nursing, computer programming, accounting, teaching) to work requiring minimal training and skill (cafeteria-food service work, dishwashing, house cleaning, janitorial work). When asked whether or not they were satisfied with their work, no definitive pattern for responding positively or negatively could be found. However, those who are in sheltered work settings, primarily persons with mental retardation, report they are satisfied with their work. Of the 16 individuals who responded negatively, some of the reasons for dissatisfaction that were repeatedly given include wanting better pay, more personal satisfaction, greater challenge, and opportunities for advancement. Two individuals expressed dissatisfaction that related to their specific disabilities: a person with visual impairment preferred work that required less use of his eyes and a person with a multiple handicap preferred a job that was less sedentary.

Reserach Question #4

What proportion of individuals in each disability group would like to receive training from appropriate community agencies? What proportion of persons with disabilities do relatives perceive as wanting training? What areas seem appropriate for training?

Computer frequency counts were used to analyze data pertaining to whether or not the persons with disabilities surveyed desired further training. Of the total number of persons who responded, 64 percent indicated that they would like to receive further training. Sixty-five percent are also unemployed as reported earlier. While these proportions are not necessarily comprised of the same individuals some overlap exists. Table 7 presents the percent of each disability group working, the percent of each group wanting training, and the percent of relatives for each group who perceive the persons with disabilities as wanting training.

Table 7

Percentage of Persons with Disabilities Not Working and Percentage Wanting Training

Disability Group	n	% not working	% want training	Relatives' perception of % want training
Cerebral Palsy	28	79	70	57
Epilepsy	9	22	11	*
Hearing Impairment	19	58	67	70
Mental Retardation	33	36	75	80
Multiple Handicap	18	89	67	77
Orthopedic Handicap	38	82	59	81
Visual Impairment	16	69	67	71

* This percentage was not included because this group had only one respondent.

Groups with high unemployment rates tend to want training opportunities. Individuals with multiple or orthopedic handicaps report highest percentages unemployed but not the highest percentages wanting training. While persons with mental retardation report a low unemployment rate relative to most other groups, they represent the highest percentage wanting further training. With the exception of relatives of persons with cerebral palsy, relatives' perceptions of those wanting training exceed the reports of disabled persons themselves.

Information regarding the proportion of persons who are not working and the proportion who want training by disability group at each site has been provided to the LCD community colleges. In some instances, these proportions vary somewhat from those derived from total subjects because of small groups but will be utilized in the planning and development of programs geared to the needs of persons in each community.

Analyses of variance were performed to determine if statistically significant differences could be found on the career development competencies when comparing those who are working and those who are not. This should reveal appropriate areas for training. Differences at the .05 level

of significance were found for the following competencies. In all cases those who are currently working report being more able to perform these competencies than those who are not working.

Managing family finances (#1)
Selecting, managing and maintaining a home (#2)
Buying and caring for clothing (#6)
Getting around the community (mobility) (#9)
Knowing and exploring occupational possibilities (#17)
Physical-manual skills (#20)

Anova procedures revealed statistically significant differences (.05) for other comparisons as well. Relatives perceived those disabled persons who are working, as compared to those who are not, as more able to perform the following competencies.

Selecting, managing and maintaining a home (#2)
Planning, buying and preparing food (#5)
Buying and caring for clothing (#6)
Utilizing recreation and leisure (#8)
Getting around the community (mobility) (#9)

Comparison of competency scores of those persons who want training and those who do not indicates statistically significant differences (.05) on the following competencies.

Acquiring self confidence (#11)
Seeking, securing and maintaining employment (#22)

Those who want training report being less able to perform these competencies. Statistically significant differences (.05) also exist when comparing relatives' perceptions of those wanting training as opposed to those who do not. Relatives who perceived the persons with disabilities as wanting training perceived them as less able to do the following competencies.

Utilizing recreation and leisure (#8)
Building and maintaining good interpersonal relationships (#13)

Research Question #5

Is there a significant difference between the disabled persons' perceptions of their competencies and their relatives' perceptions of those competencies?

Analyses of variance were used to determine if differences exist between the disabled persons' perceptions of their competencies and their relatives' perceptions. Relatives who participated in the survey were primarily spouses, parents, or siblings. Statistically significant differences (.05) were found between the perceptions of these two groups for the following competencies.

Managing family finances (#1)
Buying and caring for clothing (#6)
Achieving self awareness (#10)
Communicating adequately with others (#16)
Selecting and planning occupational choices (#18)

In each of the above cases, relatives' perceived less ability than the persons with disabilities perceived. When reviewing the disabled persons' perceptions (Table 3) it can be noted that achieving self awareness (#10) was generally reported as a competency they perceived themselves as more able to do than many other competencies. This competency, however, is one that would, by its very nature, be difficult for both persons with disabilities and relatives to assess. Managing finances (#1), clothing (#6), communicating with others (#16) and occupational choices (#18) are competencies that are more concrete and, therefore, more easily assessed. For these competencies, relatives' reports, although statistically significantly different, are not totally incongruent with the reports of disabled persons. Differences are a matter of degree, with both groups indicating that deficiencies exist in these areas.

Appendix F presents the competency levels reported by groups of relatives for every competency. The epilepsy group had one relative respondent and, therefore, is not included on the table. A statistical comparison of disabled persons' and relatives perceptions within each group and for each competency was not performed because the number of relatives responding was very small in some groups. Visual examination of perceived competency levels was deemed adequate.

Research Question #6

What barriers to attaining personal and career goals are perceived by persons with disabilities and their relatives?

There were 271 total responses to this question from persons with disabling conditions and their relatives. While some individuals surveyed gave several reasons, others did not respond to the question. A tabulation of open-ended responses was prepared. While wording varied a great deal, similar barriers were perceived by both groups. The perceived barriers and the frequency with which they were reported are presented in Table 8.

Table 8

Barriers to Goal Attainment as Perceived by Persons with Disabilities and Relatives

Barrier	Number and Proportion of Responses			
	Persons with Disabilities		Relatives	
	n	Percent	n	Percent
Handicapping condition	43	24	34	36
"Nothing"	33	19	10	11
Lack of or inadequate education, training, skills	22	13	10	11
Attitudes of others	19	11	8	8
Transportation and architectural barriers	17	10	6	6
Self confidence, self awareness	6	3	9	9
Knowing about/obtaining jobs, the job market	9	5	3	3
Finances	6	3	5	5
Personal motivation	4	2	5	5
"Don't know"	6	3	-	
Emotional problems	2	1	3	3
Other	9	5	2	2
Total	176	100	95	99

Responses in the "other" category included age, college degree, lack of guidance, and responsibilities for others.

Twenty-eight percent of total responses (77 of 271) identified handicapping condition as a barrier. When broken down, the percentage of disabled persons and relatives combined who stated "handicapping condition" was as follows:

Cerebral Palsy	40%
Epilepsy	0
Hearing Impairment	8%
Mental Retardation	4%
Multiple Handicap	13%
Orthopedic Handicap	18%
Visual Impairment	13%

As compared to other groups, more individuals with cerebral palsy and their relatives perceived disability as a handicap.

The second most frequent response category was "nothing". Individuals who responded in this manner failed to clarify their responses. Lack of education, attitudes of others, and transportation and architectural barriers were also frequently perceived as barriers.

Research Question #7

Are services pertinent to all competencies for all disability groups currently available? Do gaps exist between needed services and available services.

These questions were answered by surveying the population of all agencies serving disabled persons. Forty diverse agencies comprised the sample, but due to missing data analysis was based on the responses of 38-39 agencies. Table 9 indicates the number and percentage of agencies that serve each disability group across all three campuses. Each campus was represented by 12 to 14 agencies.

Each agency surveyed was asked to indicate whether it provided services, funding, or training for each of the 118 subcompetencies. Responses were organized by disability group and those agencies that serve each group.

Table 9

Number of Agencies Serving Disability Groups

Disability Group	Agencies serving that group (n)	Percentage of total agencies surveyed
Cerebral Palsy	28	72
Epilepsy	29	74
Hearing Impairment	25	64
Mental Retardation	26	67
Multiple Handicap	36	92
Orthopedic Handicap	31	79
Visual Impairment	27	69

Appendix G presents the percentage of agencies for each group that provided services for each subcompetency. For example, it can be noted that 27 agencies serve the visually impaired group. Of these, 22 percent provide some type of help with planning for retirement, a subcompetency of managing family finances (#1), while 89 percent provide help with identifying the individual's interests and abilities, a subcompetency of achieving self awareness (#10). This range of service provision exists for each disability group. An asterisk has been placed by those subcompetencies for which less than one-half of agencies indicated that they provide some services for that subcompetency. A tabulation of those subcompetencies with asterisks indicates that 99 percent (186/188) are in the domain of daily living skills, which involve the first nine competencies. As noted previously, persons with disabilities report doing less well on many of these competencies. The remaining one percent appears in the domain of personal-social skills, while none appear in the area of occupational guidance and preparation. Review of this chart indicates that agencies report some services available to all disability groups for all subcompetencies.

Table 10 presents LCD staffs' interpretation of the priority needs of each disability group as discussed under Research Question #1. In those cells where both slash and asterisk appear, needs exist which are not being met adequately for the subcompetencies pertaining to that competency. Services may be adequately provided for some of the subcompetencies under

Table 10

Priority Needs and Availability of Pertinent Services

Competencies	Disability Groups						
	Cerebral Palsy	Epilepsy	Hearing Impairment	Mental Retardation	Multiple Handicap	Orthopedic Handicap	Visual Impairment
1 finances	/ *	*	/ *	/ *	/ *	*	*
2 home	/ *	*	*	/ *	/ *	/ *	
3 personal care	*	*	*	/ *	*	*	*
4 family living	*	/ *	*	/ *	/ *	*	*
5 food	/ *	/ *	*	/	*	*	
6 clothing	/ *	*	*	/ *	/ *	/ *	/ *
7 civic activities	*	*	*	/ *	/ *	*	*
8 recreation	*	*	*	/ *	*	*	*
9 mobility	/ *	*	*	/	/ *	*	*
10 self awareness				/	*		*
11 self confidence		/		/	/	/	
12 social behavior							
13 interpersonal relationships							
14 independence				/			
15 problem solving				/			
16 communication				/			
17 occupational possibilities				/		/	
18 plan occupational choices				/	/		
19 work habits							
20 physical skills				/			
22 maintain employment				/			

/ priority need for that group (competency mean $\geq$ 1.50)

* competencies that contain subcompetencies for which less than 50 percent of the agencies report they offer services

that specific competency but not for all. Where the slash only appears, needs exist but services are available. In these instances, disabled persons may be appropriately referred to existing agencies who provide pertinent services. Where the asterisk alone appears, services for some subcompetencies may be offered by less than half of the agencies surveyed, but these areas have not been reported as those the group is least able to perform. It is important to note, however, that all groups could benefit from services related to all competencies. Table 10 indicates a primary focus for the LCD Project and cooperating community colleges. Those areas where the gap between needed services and available services is greatest for each disability group are primarily in the domain of daily living skills according to needs assessment data. These results should be interpreted with caution since no index has been developed to determine the type or quality of services provided for any of the subcompetencies and because of the difficulty of measuring personal-social skills and service delivery in this area.

Research Question #8

What types of assistance do local agencies need in order to provide career development services to individuals possessing disabilities?

To provide complete career development services to all disability groups, it was anticipated that agencies might wish to add new service components or expand existing services. Table 11 presents the percentage of agencies that indicated each type of assistance as essential to enable provision of career development services.

Eighty-two percent of those who responded to the questionnaire indicated that additional funding was necessary. Additional staff and inservice training were also frequently identified as needs.

Those who checked "other" were asked to specify their needs; some responses included residential programming, cooperation with area employers, more places to refer clients, expanded work base, transportation, housing, information regarding services offered by other agencies, and better community awareness. The order of items presented in Table 11 may be considered an indication of priority needs for assistance.

Table 11

Percentage of Agencies Requiring Types of Assistance

Types of Assistance	Percentage
Additional funding	82%
Additional staff	71%
Inservice training & workshops	51%
More cooperation from other agencies	47%
Training materials	42%
Greater administrative support	23%
Additional space	18%
Modification of current space	18%
Other	17%

Research Question #9

What types of training do local agencies believe will be most appropriate and efficient in enabling them to provide career development services?

Agency representatives were asked to rank five types of training. Table 12 presents the response pattern. Not all individuals ranked every item. The number of times each item was ranked first or second was combined; rankings of third, fourth, or fifth choices were also combined in order to indicate high and low priorities of personnel responding from the participating agencies.

Table 12

Ranking of Types of Training Deemed Appropriate by Agency Representatives

Types of Training	(n)	Frequency Ranked 1 or 2	Frequency Ranked 3, 4, or 5
Workshops	31	26	5
Informational Materials	32	17	15
Short Courses	21	8	12
University/College courses	20	2	19
Other	3	1	2

Workshops and the provision of informational materials were deemed to be the most appropriate and efficient types of training for agency staff. Short courses and university/college courses ranked third and fourth.

Research Question #10

What attitudes do community college faculty and staff and area employers hold toward persons with disabilities?

Table 13 indicates the scores on the Attitudes Toward Disabled Persons Scale by groups, and by campus.

Table 13

ATDP Scores for Groups on Each Campus

Campus	Group	Sample Size	Mean	SD
Iowa	staff	21	122.86	14.5
	employers	24	110.42	21.2
Brainerd	staff	21	124.05	18.3
	employers	12	118.25	21.1
Meramec	staff	20	117.15	16.3
	employers	20	123.20	25.3

Statistical comparisons by t-test between the two group means at each campus indicate the difference between staff and employers' scores. At the Iowa campus, the difference is significant. Results of Anova indicate that no other statistically significant differences exist across campuses and among groups.

Raw scores ranged from 68 (less than the 10th percentile) to 180 (the highest possible score), a spread of 112 points. However, a majority of the scores fell between 108 and 128, a range of only 20 points. The means for male and female norms are means of 110.16 and 113.45 respectively. The mean scores of staff and employers at the three campuses are above the means obtained for the norming sample. Except for scores of the Iowa employers which fall at the mean, the mean scores of staff and employers at the three campuses fall above the means obtained for the norm groups.

For the most part, scores from the LCD survey fall between the 50th and 75th percentile for non-disabled men and women (Young, et. al, 1970, p.30).

V. DISCUSSION

This section provides a discussion of the needs assessment survey in terms of each of the research questions posed. This includes implications and focus for the development of the LCD Project.

Research Question #1

What are the proficiency levels of each disability group for each competency?

Each disability group surveyed reports deficiencies related to the LCD competencies. The groups which report the greatest number of competencies with scores of 1.50 or greater are those with multiple handicaps and mental retardation. For those individuals in the multiple handicapped group, this may be indicative of the added complications that result from having more than one disabling condition. Individuals with mental retardation may have experienced difficulty in understanding some questions despite the efforts of those who developed the instruments and those who administered them. Those reporting the fewest deficiencies are individuals with visual impairment, hearing impairment, or epilepsy.

While some individuals who responded to the questionnaire may have indicated they were able to perform the competencies well, the group means indicated that all groups could benefit from opportunities to learn or improve skills in all competencies.

Research Question #2

Do differences or commonalities exist among the competency levels of the seven disability groups? What differences exist due to age or sex?

The comparison of reported competency levels in the disability groups reveals that the majority of the groups report deficiencies in the same areas, primarily those related to the performances of daily living skills. When comparisons were made by disability, statistically significant differences exist across groups for 17 competencies. In general, individuals

with multiple handicaps, orthopedic handicaps, mental retardation, and cerebral palsy report less ability in performing the competencies.

In comparing the competency levels of the two age groups, those 25 years old or less and those 26 years old or more, results show that differences exist for four competencies, all in the area of daily living skills. In all four cases, older persons report being more able to perform the competencies, perhaps reflecting the cumulative advantages of time and life experience in general.

When comparing competency levels by sex, differences were found for four competencies. Males report being less able to buy and care for clothing, whereas females report being less able to engage in civic activities, utilize recreation/leisure and know occupational possibilities. These differences appear to be related to traditional sex role stereotyping.

Research Question #3

What is the employment status of each disability group? Are employed individuals in sheltered or competitive work settings? What types of jobs are being held by those who are currently working?

The overall employment rate for persons with disabilities in the study was thirty-five percent. Persons with epilepsy reported the highest employment rate, followed by persons with mental retardation. While a relatively high employment rate for those with mental retardation may not seem to be consistent with the large number of competency deficiencies reported, consideration should be given to the fact that approximately one-third of those employed are in a sheltered setting. Thus their employment may be appropriate for their current skill levels. Those individuals with multiple handicaps report the lowest proportion employed followed by those with orthopedic handicaps and cerebral palsy. These groups with low employment rates also report being less able to perform the competencies.

The majority of those employed (48/56) are in competitive work settings. Only eight persons are in the sheltered employment situation. It would appear that given appropriate training and skill development, in most cases persons with disabilities are able to compete with non-disabled persons in the job market. However, one-third (16/48) of those employed in

the competitive market report dissatisfaction with their jobs and indicate they want better pay and more personal satisfaction, challenge, and opportunities for advancement. The jobs held by those employed are diverse and range greatly in skill requirements. The jobs held by those who are dissatisfied were also diverse and included, among others, computer programmer, teaching assistant, accounting clerk, apartment manager, and housekeeper. While those who are employed report being better able to perform the competencies as discussed under Question #4, additional training in the life-centered career development competencies would increase the work options and vocational choices for those who are currently employed and increase the employability of those persons not working.

Research Question #4

What proportion of individuals in each disability group would like to receive training from appropriate community agencies? What areas seem appropriate for training?

The majority of persons surveyed indicated they would like to receive further training. Levels of unemployment generally correspond to proportions wanting training. Individuals with mental retardation have a relatively low unemployment rate but a high proportion of individuals wanting training perhaps indicating high levels of motivation to learn and/or desire for jobs requiring higher skill levels. They may believe they are able to do more than is currently expected of them given appropriate opportunities to learn. Individuals with multiple and orthopedic handicaps report the highest proportion unemployed but not equally high proportions desiring training. These results may imply lack of motivation because of the severity of their disabilities, negative experience in attempting to overcome barriers in the past, or acceptance of current lifestyles.

In general, relatives reported that a greater proportion of persons with disabilities want training than the persons themselves reported. Relatives of persons with cerebral palsy are the only exception. They reported a smaller proportion than individuals with cerebral palsy reported and, in fact, reported the lowest proportion wanting training of all groups of relatives.

The fact that relatives generally report high proportions desiring training may indicate that relatives perceive their family members as being able to benefit from and as having interest in further training or it may indicate that the relatives see their disabled family members as underemployed.

The percentages of individuals currently unemployed would seem to indicate that employability might be the first goal of training. A comparison of competencies between those who are working and those who are not, however, indicates that those who are employed report being more capable of performing daily living skills. The perceptions of relatives confirm this. Whether the ability to perform the skills required for these competencies existed prior to employment or developed as the result of employment cannot be inferred from the data. These skills do seem to be necessary prerequisites for securing and maintaining employment.

When comparing the competency levels between those wanting training and those not, those who want training or are perceived as wanting training by relatives report differences in skill attainment in several competencies. Those who want training or are perceived as wanting training report doing less well on these competencies.

Research Question #5

Is there a significant difference between the persons with disabilities' perceptions of their competencies and their relatives' perceptions of those competencies?

In general, the competency ratings reported by persons with disabilities tended to be similar to their relatives except for the five competencies mentioned previously. For these five competencies relatives perceived less ability than reported by the persons with disabilities. The differences in ratings reflect discrepancies in degree of deficiencies perceived, not whether or not deficiencies exist. The overall similarities in perceptions confirm that deficiencies exist. Thus, staff should find that both the persons with disabilities and relatives will desire training programs designed to remove these deficiencies.

Research Question #6

What barriers to attaining personal and career goals are perceived by persons with disabilities and their relatives?

Persons with disabilities and relatives cited an impressive number of barriers to the attainment of goals. Handicapping condition, lack of education, the attitudes of others, and transportation were barriers cited often and appear to be major hurdles. Some barriers cited have overall impact on all individuals with disabling conditions while others are more individualized in nature.

Those who cited handicap as the barrier to goal attainment, which included a large proportion of individuals with cerebral palsy or their relatives, may have a somewhat hopeless attitude about their situations or may have used handicap as an all-encompassing term under which other barriers may be subsumed.

Barriers perceived by persons with disabilities and their relatives are those that non-disabled persons would probably also identify as barriers for individuals with disabilities. The exception to this would be the response "nothing". It is possible that those who responded in this way are the individuals or relatives of the individuals who are either currently working and satisfied, are in school and thus proceeding toward a goal, or are living lifestyles that have been accepted as all that is possible for them.

Lack of education and the attitudes of others comprised a large proportion of responses and are two areas being directly addressed by the LCD Project. The frequencies with which persons with disabilities and relatives cited transportation and architectural barriers seem to indicate that those persons want to be more independently mobile than they are currently able to be.

Research Question #7

Are services pertinent to all competencies for all disability groups currently available? Do gaps exist between needed services and available services.

Some services for each of the 118 LCD subcompetencies are currently available to all disability groups but gaps are evident in which priority

needs exist and a low proportion of agencies provide services. These gaps, illustrated in Table 10, provide a focus for the LCD project and cooperating community colleges. According to needs assessment results, learning opportunities for persons with cerebral palsy should center around finances, home management, food, clothing, and mobility. Those persons with epilepsy seem to need programs centered around family living and buying and preparing food. Opportunities to learn about finances seem to be needed for persons with hearing impairment, while buying and caring for clothing appears to be an area of focus for those with visual impairment. Persons with orthopedic handicaps appear to need opportunities to learn skills related to home management and clothing. Opportunities for persons with multiple handicaps should be provided for skills related to finances, home management, family living, clothing, civic activities, and mobility. Opportunities for persons with mental retardation should center around skills related to finances, home management, personal care, family living, clothing, civic activities, and recreation.

Opportunities for the development of these skills should not be provided to the exclusion of opportunities and services related to other competencies. Services that will foster the improvement of personal-social skills and occupational skills as well as daily living skills provides an individual with a complementary system that will facilitate maximum growth. With the identification of needs, interested organizations and agencies may wish to expand their services. Personnel may be trained and new programs developed to enable persons with disabling conditions to learn the essential career development competencies.

Research Question #8

What types of assistance do local agencies need in order to provide career development services to individuals possessing disabilities?

The willingness of agencies to participate in expansion of career development services to persons with disabilities will enhance the impact of the LCD Project. Agency representatives have indicated the specific types of assistance their agencies need in order to offer services in addition to those currently available to persons with disabilities. The types of assistance most frequently indicated include additional funding, additional staff, inservice training and workshops, and increased coopera-

tion among agencies. These items may be considered priority needs to facilitate agency participation.

Research Question #9

What types of training do local agencies believe will be most effective and appropriate in enabling them to provide career development services?

Agency representatives have indicated that they believe workshops and the provision of informational materials are the two most appropriate and efficient training methods available to enable their staff to provide career development services to persons with disabling conditions. Short courses and university or college courses were viewed as less appropriate and efficient, perhaps because they require too great a time commitment or because they involve learning that may not be directly applicable to job situations. This ranking by agency personnel will be considered in developing the LCD inservice training program and resource materials.

Research Question #10

What attitudes do community college faculty and staff and area employers hold toward persons with disabilities?

A review of Table 13 reflects that the mean scores of the six groups surveyed may be interpreted as reflecting attitudes that tend to be more positive than negative, more accepting than prejudicial. Persons with disabilities are perceived as being more similar to non-disabled persons than different from them. This range of scores, however, indicates that some individuals see disabled persons as different from non-disabled persons. According to the ATDP manual, this differentiation is associated with negative attitudes (Yuker, Block, & Younng, 1970).

The results obtained in this survey are, to some extent, surprisingly positive when compared to information in much of the literature, and comments from education/rehabilitation personnel and persons with disabilities seeking employment or training. One might question whether community college staff and employers in this sample are an atypical group as compared to their peers, whether they answered in a manner that is more positive than actual attitudes, or whether their attitudes may be positive

when dealing with persons with disabilities in the abstract but are less positive when dealing with actual placement into their community college setting or place of business. The reader is cautioned, however, to remember that these results are based on self report ratings from persons who were willing to cooperate with the research study and were, to some extent, aware of the purpose of the instrument. It is also likely that many of the participants were aware of legislation and civil rights issues that concern individuals with disabilities.

Although the scores obtained in this study were generally indicative of positive attitudes, sufficient number of low scores were obtained to warrant development of systematic efforts to improve attitudes such as educational and awareness building programs and increased experience with persons with disabilities.

VI. SUMMARY

The Lifelong Career Development Needs Assessment Study is the result of months of preparation, data collection, and analysis. In spite of the logistical problems typically encountered in field research, the results of the survey confirm that persons with disabilities are not able to perform all the essential skills for successful community living. Services that enable handicapped persons to learn these skills are not always readily available. The position into which persons with disabilities have been placed in our society may be characterized by the following factors.

- Individuals in the seven disability groups surveyed indicated that they do not currently possess all of the career development skills required for successful community living. Persons with multiple handicaps and persons with mental retardation report less ability to perform the competencies than other groups.
- Those areas in which individuals report most deficiency are predominantly in the domain of daily living skills. Individuals from the groups of multiple handicap, orthopedic handicap, cerebral palsy, and mental retardation generally report being less able to do these competencies than other groups surveyed. Few differences in ability to perform the competencies were found to be related to age or sex.
- Approximately one-third of the disabled persons surveyed are currently employed. Those groups who report less ability than others on the competencies also tend to be the groups with higher proportions unemployed. Of those who are working many report job dissatisfaction.
- Sixty-four percent of all persons with disabilities surveyed would like to receive further training. This was particularly representative of groups with high unemployment rates. While this may indicate that job-related training may be a primary

goal for these individuals, differences on reported competency levels between those working and those not working show that persons who are employed report better daily living skills. This suggest that daily living skills are important to successful employment.

- The perceptions of relatives tend to confirm the self reports of persons with disabilities concerning ability to perform career development competencies.
- Persons with disabilities and their relatives state that a substantial number of barriers interfere with the goal attainment of persons with disabilities. Handicapping condition was the barrier cited most often by both groups. Other barriers frequently noted were lack of education or training, the attitudes of others, and transportation and architectural barriers.
- Although the agencies surveyed currently provide services for all disability groups, a low proportion of agencies offer services in some skill areas. LCD staff is currently meeting with agency personnel to confirm information about available services. The low proportions, however, suggest that opportunities for disabled persons to learn these skills should be expanded. New learning opportunities, especially for those skills the groups are less able to perform, must be made available. The LCD project staff and community college staff will emphasize the development of materials and the training of personnel to fill these needs.
- To assure that comprehensive career development services are available to persons with disabilities, agencies and community colleges may wish to expand current services. Agency representatives indicated that the types of assistance they need to expand career development services include increased funding, staffing and inservice training.
- As a focus of the LCD model, training will be made available to agency and/or community college personnel to prepare them to provide career development services to persons with disabilities. When asked, agency representatives indicated that workshops and provision of informational materials were the most appropriate

and efficient methods for training personnel.

- The "attitudes of others" were noted as barriers to goal achievement by persons with disabilities and their relatives. According to results of the attitude scale, personnel at the community colleges and employers in the three areas have attitudes toward disabled persons that are generally accepting. Individual attitudes, however, vary considerably. Whether accepting attitudes transfer to actual interactions with disabled persons on the campus or at the job site cannot be inferred. However, agency representatives indicated they needed the employers' cooperation to facilitate provision of career development services. Persons with disabilities and relatives specifically cited employers' attitudes as a barrier to goal attainment. It is clear that attitudinal barriers do exist. An important segment of the LCD project will be geared to bring about positive change in attitudes.

These factors imply that persons with disabilities are faced with a multitude of difficulties in acquiring opportunities to learn the skills they need for optimal functioning in the community. In developing a prototype model that can be implemented by concerned community colleges, the Lifelong Career Development staff will help to alleviate the difficulties facing persons with disabilities. The cooperation of existing agencies, families, community members, advocacy groups, and others is needed to make the required immediate and long-range changes in the quality and quantity of options available to individuals with disabling conditions.

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Appendix A

Lifelong Career Development Competencies and Subcompetencies

Lifelong Career Development Competencies and Subcompetencies[1]

DAILY LIVING SKILLS

Managing Family Finances (#1)

1. Identify various forms of money
2. Count money and make change
3. Make appropriate investments such as insurance, savings, and property
4. Obtain and use bank and credit facilities
5. Keep financial records
6. Spend within a budget
7. Calculate and pay taxes
8. Begin planning for retirement

Selecting, Managing, and Maintaining a Home (#2)

9. Select adequate housing for self and/or family
10. Maintain the inside of a home (cleaning, repairs and decorating)
11. Use baisc appliances and tools
12. Maintain the outside of a home

Caring for Personal Needs (#3)

13. Choose clothing appropriate for season and the occasion
14. Take care of personal hygiene needs
15. Explain the relationship of physical fitness, nutrition and weight
16. Explain illness prevention and treatment methods
17. Describe physical characteristics for one's age group
18. Describe psychological characteristics for one's age group

Family Living and Raising Children (#4)

19. Practice (when desired) effective methods of contraception
20. Respond to needs of spouse and children
21. Explain how to care for a child's physical needs before and after birth

[1]Brolin, D. (Ed.). Life centered career education: a competency based approach. Reston, Virginia: Council for Exceptional Children, 1978, p.10.

22. Provide a safe environment for child(ren) by observing safety principles
23. Adjust to changing circumstances in the family (divorce, death, illness, child leaving home, aging parents, alcohol and drugs)

Planning, Buying, and Preparing Food (#5)

24. Plan balanced meals for both his/her and family needs
25. Purchase food within budget according to planned meals
26. Prepare food using appliances and utensils needed
27. Clean up kitchen after meal preparation
28. Store food based on properties of food (perishible vs canned foods)

Buying and Caring for Clothing (#6)

29. Purchase clothing for self and family
30. Launder washable clothing and send others to dry cleaners
31. Iron and put away clothing
32. Sew on buttons and do simple mending
33. Do simple alterations on one's clothes

Engaging in Civic Activities (#7)

34. Know basic laws and penalties for breaking the law
35. Know citizenship rights and responsibilities
36. Know how to register and to vote
37. Know what to do when stopped by a policeman (rights and responsibilities)
38. Know environmental/conservation issues

Utilizing Recreation and Leisure (#8)

39. Participate in group activities
40. Know activities and resources available
41. Understand value of recreation
42. Use recreational facilities in the community
43. Plan and choose activities according to interests
44. Plan vacations according to one's capabilities and time restrictions
45. Demonstrate good sportsmanship

Getting Around the Community (Mobility) (#9)

46. Know traffic rules and safety practices
47. Use various means of public transportation
48. Drive a car, motorcycle or ride a bicycle

PERSONAL-SOCIAL SKILLS

Achieving Self Awareness (#10)

49. Know physical strengths and limits
50. Identify his/her interests and abilities
51. Recognize emotions in self and others
52. Identify his/her needs
53. Develop inner control as opposed to external or other control
54. Use his/her strengths to provide for others' needs (spouse, children)
55. Know his/her values
56. Recognize his/her own aging process and eventual death

Acquiring Self-Confidence (#11)

57. Feel worthwhile when he/she thinks about self
58. Know what others see in him/her
59. Accept praise
60. Accept criticism
61. Believe in self
62. Have a life plan

Achieving Socially Responsible Behavior (#12)

63. Know rules and expectations of society
64. Behave in public in manner that does not cause problems for self
65. Demonstrate respect for rights of others
66. Know how to act in each of the various roles he/she plays (child, spouse, worker, etc.)

Maintaining Good Interpersonal Relationships (#13)

67. Listen and respond to others attentively
68. Make and maintain friendships with various kinds of people
69. Know sex role behavior
70. Possess a close sharing relationship with one or more persons

Achieving Independence and Interdependence (#14)

71. Understand the impact of his/her behavior on others
72. Take charge of his/her own life
73. Accept responsibility for meeting goals
74. Strive to reach his/her potential
75. Respect needs of parents, spouse, children and close friends
76. Consider others' needs when meeting his/her own

Achieving Problem-Solving Skills (#15)

77. Identify bi-polar concepts such as good-bad
78. Understand the need for goals
79. Consider alternatives
80. Anticipate consequences of one's actions
81. Know where to find good advice
82. Make plans for future events (such as education of self and children, major purchases, etc.)

Communicating Adequately With Others (#16)

83. Recognize emergency situations
84. Read at level needed for future goals
85. Write at level needed for future goals
86. Speak, gesture or use other methods of communication so that others communicate with him/her
87. Understand the subtleties of communication
88. Know how and where to locate needed information
89. Assist family in learning to communicate feelings and meanings

OCCUPATIONAL SKILLS

Knowing and Exploring Occupational Possibilities (#17)

90. Identify personal values met through work
91. Identify societal values met through work
92. Identify aspects of work related to pay (wage and salary)
93. Understand existence of certain occupational classifications
94. Identify occupational opportunities available locally
95. Identify sources of occupational information

Selecting and Planning Occupational Choices (#18)

96. Identify major occupational needs
97. Identify major occupational interests
98. Identify major occupational aptitudes
99. Identify requirements and demands of appropriate and available jobs
100. Make realistic occupational choices at all stages of adult life
101. Utilize past experience to locate occupations meeting current needs
102. Consider relationship of spouse's occupational role in relationship to his/her occupational role

Exhibiting Appropriate Work Habits and Behaviors (#19)

103. Follow directions
104. Work with others cooperatively
105. Accept supervision/supervise others appropriately
106. Know importance of good attendance and punctuality
107. Use appropriate communications skills at work
108. Meet quality standards for work
109. Follow occupational safety rules and principles

Physical-Manual Skills (#20)

110. Possess satisfactory balance and coordination for job chosen
111. Possess satisfactory dexterity for job chosen
112. Possess satisfactory stamina and endurance for job chosen
113. Possess satisfactory sensory discrimination for job chosen

Obtaining a Specific Occupational Skill (#21)

a. _____
b. _____
c. _____
d. _____
e. _____
f. _____

Seeking, Securing and Maintaining Employment (#22)

114. Search for a job using appropriate resources
115. Apply for a job including filling out application
116. Demonstrate good interviewing skills
117. Adjust to competitive standards (make production standards)
118. Seek help when things go wrong

Appendix B

Disabled Person's Questionnaire (Form A)

LIFELONG CAREER DEVELOPMENT PROJECT

NEEDS ASSESSMENT QUESTIONNAIRE: DISABLED PERSON (FORM A)

QUESTIONNAIRE

COMPLETE THE FOLLOWING INFORMATION ABOUT THE DISABLED PERSON:

Log # _____	Ethnic Group _____
Age _____	Referring Agency _____
Sex _____	City/State _____
Disability (Primary/Secondary) _____	
_____	

INSTRUCTIONS TO DISABLED PERSON (READ ALOUD):

The University of Missouri is conducting a survey for our community college to determine how well people with disabilities have learned the skills important for successful living and working. These skills pertain to daily living activities (such as managing money, buying food and clothes, renting or buying a place to live, taking care of a family, driving a car, etc.); to personal-social relationships (such as getting along with others, knowing how to act in various social situations, etc.); and to employment (such as having proper work habits, occupational skills, knowledge of where and how to find jobs, etc.).

I want to ask some questions about your education, training, and employment. Your responses will be compiled by the University of Missouri staff. You, as an individual respondent, will not be identified. We would like you to sign the Release of Information form to use this information. I want you to do an activity with some cards to find out what skills you now have and those that you think you need. It will take about 45 minutes to do these things.

We are interviewing a lot of people to determine if there is a need to provide additional training programs in this community. Your opinions are really needed. This is not a test and there are no right or wrong answers. All right?

READ (ALOUD) THE FOLLOWING:

I need to gather some information from you.

1. *When were you born?* _____

2. *Who do you live with?*

parents _____
spouse _____
by myself _____
group home _____
other _____

3. *Have you been in the military service?* _____ *If so, what branch?* _____

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4. *How far did you go in school (grade)?* _____ (If person went to college/university or voc-tech school, please name) _____

5. *What jobs have you held and for how long?* (start with most recent) _____

6. *Are you presently working?* _____ *If so, what are you doing and are you satisfied with your job?* _____

_____ *If no, why not?* _____

7. *Have you ever received any services from community agencies after high school to help you learn daily living, personal-social, or occupational skills?* _____ *If so, tell me which ones and what they helped you learn?* (list below) (Reviewing the list of skills with the individual will help in responding to this question and those below.)

Name of Agency	*Services Provided*	*Approx. Dates*

8. *Would you like to receive further training from appropriate community agencies?* _____ *If not, why?* _____

9. *What daily living skills do you feel you need to learn?* _____

What types of assistance do you feel you need to learn these skills? (training, counseling, information, transportation, etc.) _____

What services are available to help you learn these skills? _____

10. *What personal-social skills do you feel you need to learn?* _____

What types of assistance do you feel you need to learn these skills? _____

_____

_____

What services are available to help you learn these skills? _____

_____

_____

11. *What occupational skills do you feel you need to learn?* _____

_____

_____

What types of assistance do you feel you need to learn these skills? _____

_____

_____

What services are available to help you learn these skills? _____

_____

_____

12. *Do you feel you know enough about jobs that might be available in this community?* _____ *If not, what types of assistance would you like to have?* _____

_____

_____

What services are available to help you learn this information? _____

_____

_____

13. *What do you think interferes with attaining your desired career and personal goals?*

_____

_____

PART II: CARD SORT

READ ALOUD THE FOLLOWING:

Now, I would like to find out how well you think you have learned a number of daily living, personal-social, and occupational skills.

In front of you is a set of cards, with a specific skill written on each card. For each one, we would like you to decide whether you believe that you are <u>able to do it well</u>, only <u>partially well</u>, or <u>not at all</u>. What you need to do is read each card (you may want to read each card to the individual) *and decide the extent to which you have the skill and then place it in <u>one</u> of four categories.*

See these four (4) cards? (Show individual the four (4) cards: ABLE TO DO WELL, ABLE TO DO PARTIALLY, NOT ABLE TO DO, AND DOES NOT APPLY TO ME). *The last card should be used if the statement does not apply to you at the present time. For example, the statement "respond to needs of spouse and children" would not apply if you are not married and have no children.*

Let's do the first five cards together to get the idea.

You will notice that the first two statements are very basic skills and are things that may have been learned when you were young. We have placed these easy statements in the questionnaire because some people are not able to do them.

Too, there are some statements that require very high level skills. So we have both easy and difficult levels of skills for you to sort.

Read the first five statements and help the individual decide which place to put them one at a time. Then say:

Do you get the idea? Are there further questions? If not, begin sorting the cards.

You may record the individual's responses on the answer sheet as the cards are sorted or after they are completely sorted. After all cards are sorted, thank the person and indicate these results will be used to develop new resources for people with disabilities if we find they are needed. Use the following code for recording card sort responses:

(1)	= ABLE TO DO WELL
(2)	= ABLE TO DO PARTIALLY
(3)	= NOT ABLE TO DO
(4)	= DOES NOT APPLY TO ME

After the person leaves, complete the following SUPPLEMENTARY DATA.

Cooperation (good, fair, poor) _____

Additional comments _____

_____

_____

_____

_____

Name of Interviewer _____

Interviewer's School or Agency _____

Address _____

Date _____

Appendix C

Relative's Questionnaire (Form B)

LIFELONG CAREER DEVELOPMENT PROJECT

NEEDS ASSESSMENT QUESTIONNAIRE: DISABLED PERSON'S RELATIVE (FORM B)

QUESTIONNAIRE

COMPLETE THE FOLLOWING INFORMATION ABOUT THE DISABLED PERSON'S RELATIVE:

Log # _____ (same as disabled relative)	Ethnic Group _____
Age _____	Address _____
Sex _____	_____
Relationship to the Disabled Person _____	

INSTRUCTIONS TO THE RELATIVE (READ ALOUD):

The University of Missouri is conducting a survey for our community college to determine how well people with disabilities have learned the skills important for successful living and working. These skills pertain to daily living activities (such as managing money, buying food and clothes, renting or buying a place to live, taking care of a family, driving a car, etc.); to personal-social relationships (such as getting along with others, knowing how to act in various social situations, etc.); and to employment (such as having proper work habits, occupational skills, knowledge of where and how to find jobs, etc.).

I want to ask some questions about your disabled family member's education, training, and employment. Your responses will be compiled by the University of Missouri staff. Neither you nor your relative will be identified. We would like you to sign the Release form to use this information. I want you to do an activity with some cards to find out what skills he/she now has and those that you think he/she needs. It will take about 45 minutes to do these things.

We are interviewing a lot of people to determine if there is a need to provide additional training programs in this community. Your opinions are really needed. This is not a test and there are no right or wrong answers. All right?

READ (ALOUD) THE FOLLOWING:

I need to gather some information from you about your relative.

1. *How often are you in contact with your disabled relative?* _____*daily,* _____ *weekly,* _____*monthly,* _____*other. If other, please specify* _____.

2. *Who does he/she live with?* _____*parents,* _____*spouse,* _____*by him/herself,* _____*group home,* _____*other.*

3. *Does he/she seem satisfied and adjusted to living in this situation?* _____. *If no, what seems to be the problem?* _____.

4. *How far did he/she go in school (grade)?* _____ (If person went to college/university or voc-tech school, please name) _____

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5. *What jobs has he/she held and for how long?* (start with most recent) _____

6. *Is he/she presently working?* _____ *If so, what is he/she doing and is he/she satisfied with the job?* _____

_____ *If not, why not?* _____

7. *Has he/she ever received any services from community agencies after high school to help him/her learn daily living, personal-social, or occupational skills?* _____ *If so, tell me which ones and what they helped him/her learn?* (list below) (Reviewing the list of skills with the individual will help in responding to this question and those below.)

Name of Agency	*Services Provided*	*Approx. Dates*

8. *Do you think he/she would like to receive further training from appropriate community agencies?* _____ *If not, why?* _____

9. *What daily living skills do you feel he/she needs to learn?* _____

What types of assistance do you feel he/she needs to learn these skills? (training, counseling, information, transportation, etc.) _____

What services are available to help him/her learn these skills? _____

10. *What personal-social skills do you feel he/she needs to learn?* _____

What types of assistance do you feel he/she needs to learn these skills? _____

_____

_____

What services are available to help him/her learn these skills? _____

_____

_____

11. *What occupational skills do you feel he/she needs to learn?* _____

_____

_____

What types of assistance do you feel he/she needs to learn these skills? _____

_____

_____

What services are available to help him/her learn these skills? _____

_____

_____

12. *Do you feel he/she knows enough about jobs that might be available in this community?* _____ *If not, what types of assistance would you like him or her to have?* _____

_____

_____

What services are available to help him/her learn this information? _____

_____

_____

13. *What do you think interferes with your relative attaining his/her desired career and personal goals?* _____

_____

PART II: CARD SORT

READ ALOUD THE FOLLOWING:

Now, I would like to find out how well you think your relative has learned a number of daily living, personal-social, and occupational skills.

In front of you is a set of cards, with a specific skill written on each card. For each one, we would like you to decide whether you believe that he/she is <u>able to do it well</u>, only <u>partially well</u>, or <u>not at all</u>. What you need to do is read each card (you may want to read each card to the individual) *and decide the extent to which he/she has the skill and then place it in <u>one</u> of four categories.*

See these four (4) cards? (Show individual the four (4) cards: ABLE TO DO WELL, ABLE TO DO PARTIALLY, NOT ABLE TO DO, AND DOES NOT APPLY TO ME). *The last card should be used if the statement does not apply to your relative at the present time. For example, the statement "respond to needs of spouse and children" would not apply if he/she is not married and has no children.*

Let's do the first five cards togehter to get the idea.

You will notice that the first two statements are very basic skills and are things that may have been learned when your relative was young. We have placed these easy statements in the questionnaire because some people are not able to do them.

Two, there are some statements that require very high level skills. So we have both easy and difficult levels of skills for you to sort.

Read the first five statements and help the individual decide which place to put them one at a time. Then say:

Do you get the idea? Are there further questions? If not, begin sorting the cards.

You may record the individual's responses on the answer sheet as the cards are sorted or after they are completely sorted. After all cards are sorted, thank the person and indicate these results will be used to develop new resources for people with disabilities if we find they are needed. Use the following code for recoding card sort responses:

1	= ABLE TO DO WELL
2	= ABLE TO DO PARTIALLY
3	= NOT ABLE TO DO
4	= DOES NOT APPLY TO MY RELATIVE

After the person leaves, complete the following SUPPLEMENTARY DATA.

Cooperation (good, fair, poor) _____

Additional comments _____

_____

_____

_____

_____

Name of Interviewer _____

Interviewer's School or Agency _____

Address _____

Date _____

Appendix D

Agency Questionnaire (Form C)

LIFELONG CAREER DEVELOPMENT PROJECT

NEEDS ASSESSMENT QUESTIONNAIRE: AGENCY (FORM C)

PURPOSE OF SURVEY:

This survey has been designed to determine existing services in your community for the disabled relative to daily living, personal-social, and occupational skills and to determine if additional services might be made available to the disabled following appropriate training. Part I of the questionnaire, defining the disabled populations utilized in this study, simply asks which of these seven disability groups your agency serves and which you anticipate your agency might serve after receiving training. Part II assesses the services offered related to skills which have been identified as important for all persons in living and working. Part III requests your input regarding agency needs and training of staff. Part IV requests factual information about your agency.

PART I. DISABILITIES SERVED

INSTRUCTIONS, PART I

Place a (✓) in the space provided if you currently are providing services to this disability group. Make the (✓) on this questionnaire.

Place an (x) in the space provided if you anticipate that your agency will consider serving this disability group if appropriate training, administrative changes or supportive services by other community agencies are provided to you. Make the (x) on this questionnaire.

_____ 1. Blindness and visual impairment: visual acuity not greater than 20/200 in the better eye with correction or normal central visual acuity (20/20) but whose field of vision is limited to 20 degrees or less;

_____ 2. Deafness and hard of hearing: current capacity to hear is 50 or more decibels (dB) loss;

_____ 3. Mental Retardation: general intellectual functioning measured between 40 and 70 on an individual intelligence test (Wechsler or Stanford Binet), accompanied by deficits in adaptive behavior, and occurring in the development years;

_____ 4. Cerebral Palsy: diagnosis by a neurologist and any of the combinations of symptoms of brain damage classified by medical authorities as cerebral palsy and occurring in the developmental period of the person's life;

_____ 5. Epilepsy: diagnosis by a neurologist as an abnormal discharge of electrical energy in the brain resulting in the pattern of symptoms classified by medical authorities as epilepsy;

_____ 6. Orthopedic handicapped: a loss of a limb or a 50 per cent loss of use of a limb as judged by medical/paramedical authorities;

_____ 7. Multiple Handicapped: more than one disabling condition neither of which can easily be identified as primary and the other(s) as secondary.

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PART II. CAREER DEVELOPMENT SERVICES PROVIDED

INSTRUCTIONS, PART II

1. Please circle the appropriate letter after the numbered statements listed on this part of the questionnaire. Use the following code:

   a = yes, service is provided
   b = no, but my agency anticipates providing this service when appropriate training is received, administrative changes, or other community agencies provide us with more supportive services.
   c = services not provided and not anticipated.

2. If you wish to make any comments about an item, please write them underneath the item.

If there are no questions, please begin the questionnaire. As you read these statements place the following or similar words in front of each statement:

"My agency trains or assists the people we see to"...(identify various forms of money etc.)

DAILY LIVING SKILLS

Manage Family Finances

1. Identify various forms of money	a	b	c
2. Count money and make change	a	b	c
3. Make appropriate investments such as insurance, savings, and property	a	b	c
4. Obtain and use bank and credit facilities	a	b	c
5. Keep financial records	a	b	c
6. Spend within a budget	a	b	c
7. Calculate and pay taxes	a	b	c
8. Begin planning for retirement	a	b	c

Select, Manage, and Maintain a Home

9. Select adequate housing for self and/or family	a	b	c
10. Maintain the inside of a home (cleaning, repairs, and decorating)	a	b	c
11. Use basic appliances and tools	a	b	c
12. Maintain the outside of a home	a	b	c

Care for Personal Needs

13. Choose clothing appropriate for season and the occasion	a	b	c
14. Take care of personal hygiene needs	a	b	c
15. Explain the relationship of physical fitness, nutrition, and weight	a	b	c
16. Explain illness prevention and treatment methods	a	b	c
17. Describe physical characteristics for one's age group	a	b	c
18. Describe psychological characteristics for one's age group	a	b	c

Family Living and Raising Children

19. Practice (when desired) effective methods of contraception	a	b	c
20. Respond to needs of spouse and children	a	b	c
21. Explain how to care for a child's physical needs before and after birth	a	b	c
22. Provide a safe environment for child(ren) by observing safety principles	a	b	c
23. Adjust to changing circumstances in the family (divorce, death, illness, child leaving home, aging parents, alcohol and drugs)	a	b	c

Plan, Buy, and Prepare Food

24. Plan balanced meals for both his/her and family needs	a	b	c
25. Purchase food within budget according to planned meals	a	b	c
26. Prepare food using appliances and utensils needed	a	b	c
27. Clean up kitchen after meal preparation	a	b	c
28. Store food based on properties of food (perishible vs canned foods)	a	b	c

Buy and Care for Clothing

29. Purchase clothing for self and family	a	b	c
30. Launder washable clothing and send others to dry cleaners	a	b	c
31. Iron and put away clothing	a	b	c
32. Sew on buttons and do simple mending	a	b	c
33. Do simple alterations on one's clothes	a	b	c

Engage in Civic Activities

34. Know basic laws and penalties for breaking the law a b c

35. Know citizenship rights and responsibilities a b c

36. Know how to register and to vote a b c

37. Know what to do when stopped by a policeman (rights and responsibilities) a b c

38. Know environmental/conservation issues a b c

Utilizing Recreation and Leisure

39. Participate in group activities a b c

40. Know activities and resources available a b c

41. Understand value of recreation a b c

42. Use recreational facilities in the community a b c

43. Plan and choose activities according to interests a b c

44. Plan vacations according to one's capabilities and time restrictions a b c

45. Demonstrate good sportsmanship a b c

Getting Around the Community (Mobility)

46. Know traffic rules and safety practices a b c

47. Use various means of public transportation a b c

48. Drive a car, motorcycle or ride a bicycle a b c

PERSONAL-SOCIAL SKILLS

Achieve Self Awareness

49. Know physical strengths and limits a b c

50. Identify his/her interests and abilities a b c

51. Recognize emotions in self and others a b c

52. Identify his/her needs a b c

53. Develop inner control as opposed to external or other control a b c

54. Use his/her strengths to provide for other's needs (spouse, children) a b c

55. Know his/her values a b c

56. Recognize his/her own aging process and eventual death a b c

Acquire Self-Confidence

57. Feel worthwhile when he/she thinks about self	a	b	c
58. Know what others see in him/her	a	b	c
59. Accept praise	a	b	c
60. Accept criticism	a	b	c
61. Believe in self	a	b	c
62. Have a life plan	a	b	c

Achieving Socially Responsible Behavior

63. Know rules and expectations of society	a	b	c
64. Behave in public in manner that does not cause problems for self	a	b	c
65. Demonstrate respect for rights of others	a	b	c
66. Know how to act in each of the various roles he/she plays (child, spouse, worker, etc.)	a	b	c

Maintain Good Interpersonal Relationships

67. Listen and respond to others attentatively	a	b	c
68. Make and maintain friendships with various kinds of people	a	b	c
69. Know sex role behavior	a	b	c
70. Possess a close sharing relationship with one or more persons	a	b	c

Achieving Independence and Interdependence

71. Understand the impact of his/her behavior on others	a	b	c
72. Take charge of his/her own life	a	b	c
73. Accept responsibility for meeting goals	a	b	c
74. Strive to reach his/her potential	a	b	c
75. Respect needs of parents, spouse, children and close friends	a	b	c
76. Consider others needs when meeting his/her own	a	b	c

Achieve Problem-Solving Skills

77. Identify bi-polar concepts such as good-bad	a	b	c
78. Understand the need for goals	a	b	c
79. Consider alternatives	a	b	c

80. Anticipate consequences of one's actions a b c

81. Know where to find good advice a b c

82. Make plans for future events (such as education of self and children, major purchases, etc.) a b c

Communicate Adequately With Others

83. Recognize emergency situations a b c

84. Read at level needed for future goals a b c

85. Write at level needed for future goals a b c

86. Speak, gesture or use other methods of communication so that others communicate with him/her a b c

87. Understand the subleties of communication a b c

88. Know how and where to locate needed information a b c

89. Assist family in learning to communicate feelings and meanings a b c

OCCUPATIONAL SKILLS

Know and Explore Occupational Possibilities

90. Identify personal values met through work a b c

91. Identify societal values met through work a b c

92. Identify aspects of work related to pay (wage and salary) a b c

93. Understand existence of certain occupational classifications a b c

94. Identify occupational opportunities available locally a b c

95. Identify sources of occupational information a b c

Select and Plan Occupational Choices

96. Identify major occupational needs a b c

97. Identify major occupational interests a b c

98. Identify major occupational aptitudes a b c

99. Identify requirements and demands of appropriate and available jobs a b c

100. Make realistic occupational choices at all stages of adult life a b c

101. Utilize past experience to locate occupations meeting current needs a b c

102. Consider relationship of spouse's occupational role in relationship to his/her's a b c

Exhibit Appropriate Work Habits and Behaviors

103. Follow directions	a	b	c
104. Work with others cooperatively	a	b	c
105. Accept supervision/supervise others appropriately	a	b	c
106. Know importance of good attendance and punctuality	a	b	c
107. Use appropriate communications skills at work	a	b	c
108. Meet quality standards for work	a	b	c
109. Follow occupational safety rules and principles	a	b	c

Physical-Manual Skills

110. Possess satisfactory balance and coordination for job chosen	a	b	c
111. Possess satisfactory dexterity for job chosen	a	b	c
112. Possess satisfactory stamina and endurance for job chosen	a	b	c
113. Possess satisfactory sensory discrimination for job chosen	a	b	c

Obtaining a Specific Occupational Skill

a. _____

b. _____

c. _____

d. _____

e. _____

f. _____

Seek, Secure and Maintain Employment

114. Search for a job using appropriate resources	a	b	c
115. Apply for a job including filling out application	a	b	c
116. Demonstrate good interviewing skills	a	b	c
117. Adjust to competitive standards (make production standards)	a	b	c
118. Seek help when things go wrong	a	b	c

PART III. AGENCY REQUIREMENTS TO ENABLE PROVISION OF SERVICES

1. Please check (✓) the types of assistance your agency and staff need in order to provide further career development services to disabled individuals who are not currently being served.

_____ additional funding
_____ additional staff
_____ additional space
_____ modification of current space
_____ inservice training and workshops
_____ training materials
_____ more cooperation from other agencies
_____ greater administrative support
_____ other (please specify) _____

2. Of those items marked above please write the one which is most essential (first priority) and explain.

3. Of those items marked above please write the one which is next most essential (second priority) and explain.

4. If you think inservice training relevant to career development for disabled individuals would be helpful to your agency staff, what would be the most appropriate and efficient means of providing that training? Please rank the following (1, 2, 3, etc.) with 1 being most appropriate and efficient.

_____ workshops
_____ provision of informational materials
_____ university/college courses
_____ short courses
_____ other (please specify): _____

5. The agenda for inservice training programs can be adapted to fit your staff needs. Please list general areas and/or specific topics in which your staff would like to receive training.

_____

_____

_____

_____

_____

6. Please make any further comments that you feel are pertinent to our study.

_____

_____

_____

_____

PART IV: AGENCY DATA

Name of Agency: _____

Full Address: _____ Telephone _____

Type of Agency: State _____ Federal _____ State/Federal _____
County _____ City _____ Private _____
Other (please specify) _____

Number of professional staff: full-time _____ part-time _____

Major service(s) provided _____

_____ _____

Major population served (adults, children, families, handicapped, non-handicapped, etc.)

_____

Number of persons served per year _____

Average length of contact _____ Average number of contacts _____

Major sources of referral to your agency _____

_____ _____ _____

Respondent's Name _____

Position _____

Appendix E

Attitudes Toward Disabled Persons Scale (Form D)

FORM B 12/20/64

ATDP SCALE

READ EACH STATEMENT AND PUT AN "X" IN THE APPROPRIATE COLUMN ON THE ANSWER SHEET. DO NOT MAKE ANY MARKS ON THE QUESTION SHEETS.

PLEASE ANSWER EVERY QUESTION

---

1. Disabled persons are usually friendly.
2. People who are disabled should not have to pay income taxes.
3. Disabled people are no more emotional than other people.
4. Disabled persons can have a normal social life.
5. Most physically disabled persons have a chip on their shoulder.
6. Disabled workers can be as successful as other workers.
7. Very few disabled persons are ashamed of their disabilities.
8. Most people feel uncomfortable when they associate with disabled people.
9. Disabled people show less enthusiasm than non-disabled people.
10. Disabled people do not become upset any more easily than non-disabled people.
11. Disabled people are often less aggressive than normal people.
12. Most disabled persons get married and have children.
13. Most disabled persons do not worry any more than anyone else.
14. Employers should not be allowed to fire disabled employees.
15. Disabled people are not as happy as non-disabled ones.
16. Severely disabled people are harder to get along with than are those with minor disabilities.
17. Most disabled people expect special treatment.
18. Disabled persons should not expect to lead normal lives.
19. Most disabled people tend to get discouraged easily.
20. The worst thing that could happen to a person would be for him to be very severely injured.

ATDP SCALE

21. Disabled children should not have to compete with non-disabled children.

22. Most disabled people do not feel sorry for themselves.

23. Most disabled people prefer to work with other disabled people.

24. Most severely disabled persons are not as ambitious as other people.

25. Disabled persons are not as self-confident as physically normal persons.

26. Most disabled persons don't want more affection and praise than other people.

27. It would be best if a disabled person would marry another disabled person.

28. Most disabled people do not need special attention.

29. Disabled persons want sympathy more than other people.

30. Most physically disabled persons have different personalities than normal persons.

ATDP - FORM B

CODE # _____ ATDP SCALE ANSWER SHEET FORM B

Use this answer sheet to indicate how much you agree or disagree with each of the statements about disabled people on the attached list. Put an "X" through the appropriate number from +3 to -3 depending on how you feel in each case.

+3: I AGREE VERY MUCH
+2: I AGREE PRETTY MUCH
+1: I AGREE A LITTLE
-1: I DISAGREE A LITTLE
-2: I DISAGREE PRETTY MUCH
-3: I DISAGREE VERY MUCH

PLEASE ANSWER EVERY ITEM

(1)	-3	-2	-1	+1	+2	+3	(16)	-3	-2	-1	+1	+2	+3
(2)	-3	-2	-1	+1	+2	+3	(17)	-3	-2	-1	+1	+2	+3
(3)	-3	-2	-1	+1	+2	+3	(18)	-3	-2	-1	+1	+2	+3
(4)	-3	-2	-1	+1	+2	+3	(19)	-3	-2	-1	+1	+2	+3
(5)	-3	-2	-1	+1	+2	+3	(20)	-3	-2	-1	+1	+2	+3
(6)	-3	-2	-1	+1	+2	+3	(21)	-3	-2	-1	+1	+2	+3
(7)	-3	-2	-1	+1	+2	+3	(22)	-3	-2	-1	+1	+2	+3
(8)	-3	-2	-1	+1	+2	+3	(23)	-3	-2	-1	+1	+2	+3
(9)	-3	-2	-1	+1	+2	+3	(24)	-3	-2	-1	+1	+2	+3
(10)	-3	-2	-1	+1	+2	+3	(25)	-3	-2	-1	+1	+2	+3
(11)	-3	-2	-1	+1	+2	+3	(26)	-3	-2	-1	+1	+2	+3
(12)	-3	-2	-1	+1	+2	+3	(27)	-3	-2	-1	+1	+2	+3
(13)	-3	-2	-1	+1	+2	+3	(28)	-3	-2	-1	+1	+2	+3
(14)	-3	-2	-1	+1	+2	+3	(29)	-3	-2	-1	+1	+2	+3
(15)	-3	-2	-1	+1	+2	+3	(30)	-3	-2	-1	+1	+2	+3

Appendix F

Differences of Disability Groups on Competencies

Differences of Disability Groups on Competencies

Competency	Less Able → More Able						
1 finances	MR	Ma	MI	CP	VI	Or	Sp
Disabled person*	1.89	1.70	1.57	1.55	1.46	1.45	1.33
Relative	2.05	2.04	1.32	1.38	1.48	1.55	**
2 home	MR	Or	Sp	CP	Ma	VI	MI
Disabled person*	1.76	1.58	1.29	2.06	1.64	1.27	1.41
Relative	1.50	1.90	**	2.36	2.19	1.39	1.27
3 personal care	MR	CP	Sp	Or/Ma/VI			MI
Disabled person	1.51	1.31	1.30	1.29	1.29	1.29	1.18
Relative	1.52	1.56	**	1.40	1.68	1.24	1.13
4 family	MR	Ma	Sp	Or	MI	CP	VI
Disabled person*	2.00	1.53	1.50	1.48	1.48	1.41	1.30
Relative	1.73	2.22	**	1.35	1.20	1.76	1.21
5 food	MR	CP	Ma	Or	VI	Sp	MI
Disabled person*	1.60	1.58	1.49	1.37	1.19	1.76	1.16
Relative	1.49	1.97	1.78	1.77	1.36	**	1.20
6 clothing	CP	MR	Ma	VI	Or	Sp	MI
Disabled person*	2.09	1.75	1.67	1.65	1.61	.28	1.16
Relative	2.29	1.70	2.05	1.96	1.94	**	1.32
7 civic activities	MR	Ma	Or	CP	MI	VI	Sp
Disabled person*	2.00	1.38	1.33	1.32	1.29	1.23	1.18
Relative	1.78	1.84	1.58	1.49	1.27	1.17	**
8 recreation	MR	Or	Sp	CP	Ma	VI	MI
Disabled person*	1.50	1.35	1.34	1.31	1.28	1.26	1.23
Relative	1.52	1.38	**	1.48	1.75	1.33	1.22
9 mobility	CP	MR	Ma	VI	Or	Sp/MI	
Disabled person*	1.88	1.83	1.55	1.49	1.46	1.17	1.17
Relative	1.96	1.56	1.02	1.52	1.63	**	1.25
10 self awareness	MR	Ma	Or	MI	VI	CP	Sp
Disabled person*	1.65	1.36	1.25	1.22	1.21	1.19	1.15
Relative	1.67	1.58	1.38	1.34	1.36	1.43	**
11 self confidence	MR	Ma	Sp	Or	VI	CP	MI
Disabled person	1.62	1.37	1.36	1.33	1.48	1.45	1.30
Relative	1.67	1.65	**	1.55	1.50	1.61	1.41

Competency	Less Able → More Able						
12 social behavior	MR	Ma	MI	CP	Or	Sp	VI
Disabled person*	1.68	1.36	1.21	1.21	1.20	1.13	1.11
Relative	1.37	1.65	1.18	1.20	1.36	**	1.18
13 interpersonal relationships	MR	Ma	MI	CP	Or	Sp	VI
Disabled person	1.60	1.32	1.20	1.13	1.21	1.10	1.22
Relative	1.45	1.62	1.18	1.23	1.20	**	1.25
14 independence	MR	Ma	Or	CP	MI	Sp	VI
Disabled person*	1.60	1.38	1.35	1.29	1.26	1.23	1.20
Relative	1.65	1.78	1.55	1.49	1.31	**	1.26
15 problem solving	MR	Or	Sp	MI	Ma	CP	VI
Disabled person*	1.72	1.36	1.31	1.27	1.23	1.18	1.17
Relative	1.78	1.48	**	1.25	1.65	1.38	1.26
16 communication	MR	Ma	CP/Sp		MI	VI	Or
Disabled person*	1.68	1.40	1.38	1.38	1.36	1.32	1.27
Relative	1.77	1.71	1.67	**	1.25	1.60	1.50
17 occupational possibilities	MR	Or	CP	Sp	Ma	VI	MI
Disabled person*	1.91	1.52	1.44	1.42	1.40	1.31	1.30
Relative	1.93	1.69	1.64	**	1.78	1.38	1.32
18 plan occupational choices	MR	Ma	Or	CP	Sp	VI	MI
Disabled person*	1.80	1.57	1.46	1.37	1.32	1.30	1.27
Relative	2.20	2.11	1.64	1.72	**	1.42	1.37
19 work habits	MR	Ma	Sp	CP	Or	VI	MI
Disabled person*	1.41	1.26	1.27	1.19	1.15	1.15	1.10
Relative	1.44	1.39	**	1.36	1.33	1.15	1.17
20 physical skills	MR	CP/Sp		Or	Ma	VI	MI
Disabled person	1.48	1.41	1.41	1.40	1.30	1.26	1.21
Relative	1.52	1.48	**	1.41	1.44	1.25	1.01
22 maintain employment	MR	CP	VI	Or	Sp	Ma	MI
Disabled person*	1.90	1.44	1.36	1.34	1.30	1.25	1.19
Relative	1.94	1.78	1.34	1.47	**	2.03	1.28

The asterisk (*) indicates a statistically significant (.05) difference among the groups' scores on that competency.

** Relatives' score for the epilepsy group is not reported because there was only one respondent.

Appendix G

Percentage of Agencies Providing Services for Each Disability Group for Each Subcompetency

Percentage of Agencies Providing Services
For Each Disability Group for Each Subcompetency

Subcompetencies	Cerebral Palsy (28 agencies)	Epilepsy (29 agencies)	Hearing Impairment (25 agencies)	Mental Retardation (26 agencies)	Multiple Handicap (36 agencies)	Orthopedic Handicap (31 agencies)	Visual Impairment (27 agencies)
Managing Family Finances (#1)							
1. Identify various forms of money	57	62	38*	69	67	58	63
2. Count money and make change	61	62	64	73	67	62	67
3. Make appropriate investments such as insurance, savings, and property	43*	46*	40	44*	40*	39*	44*
4. Obtain and use bank and credit facilities	50	52	56	62	44*	46*	52
5. Keep financial records	50	52	48	54	50*	48*	59
6. Spend within a budget	68	69	68	77	64	65	67
7. Calculate and pay taxes	46*	46*	48	48*	43*	42*	48*
8. Begin planning for retirement	18*	18*	20*	20*	17*	16*	22*
Select, Manage, and Maintain a Home (#2)							
9. Select adequate housing for self and/or family	48*	45*	50	50	46*	47*	53
10. Maintain the inside of a home (cleaning, repairs and decorating)	43*	45*	40*	50	47*	42*	52
11. Use basic appliances and tools	50	52	52	58	50	48*	59
12. Maintain the outside of a home	32*	31*	36*	38*	31*	32*	41
Care for Personal Needs (#3)							
13. Choose clothing appropriate for season and the occasion	68	69	68	81	64	65	70
14. Take care of personal hygiene needs	71	72	72	85	69	68	78
15. Explain the relationship of physical fitness, nutrition and weight	50	55	48*	58	56	52	59
16. Explain illness prevention and treatment methods	46	52	48*	58	58	48*	56

* Highlights those at less than 50 percent

	Cerebral Palsy	Epilepsy	Hearing Impairment	Mental Retardation	Multiple Handicap	Orthopedic Handicap	Visual Impairment
17. Describe physical characteristics for one's age group	36*	39*	32*	35*	37*	39*	44*
18. Describe psychological characteristics for one's age group	43*	39*	40*	38*	44*	45*	52*
Family Living and Raising Children (#4)							
19. Practice (when desired) effective methods of contraception	43*	45*	48*	54	42*	42*	52
20. Respond to needs of spouse and children	43*	45*	48*	54	50	42*	56
21. Explain how to care for a child's physical needs before and after birth	36*	38*	40*	38*	33*	35*	44*
22. Provide a safe environment for child(ren) by observing safety principles	43*	45*	44*	46*	44*	42*	56
23. Adjust to changing circumstances in the family (divorce, death, illness, child leaving home, aging parents, alcohol and drugs)	56	55	54	58	60	53	62
Plan, Buy, and Prepare Food (#5)							
24. Plan balanced meals for both his/her and family needs	46*	48*	48*	58	47*	45*	52
25. Purchase food within budget according to planned meals	46*	48*	48*	58	47*	45*	52
26. Prepare food using appliances and utensils needed	46*	48*	48*	58	50	45*	56
27. Clean up kitchen after meal preparation	43*	45*	44*	54	47*	42*	52
28. Store food based on properties of food (perishible vs canned foods)	43*	45*	44*	54	47*	42*	52
Buy and Care for Clothing (#6)							
29. Purchase clothing for self and family	50	52	52	58	47*	48*	56
30. Launder washable clothing and send others to dry cleaners	43*	45*	44*	54	44*	42*	48*

	Cerebral Palsy	Epilepsy	Hearing Impairment	Mental Retardation	Multiple Handicap	Orthopedic Handicap	Visual Impairment
31. Iron and put away clothing	43*	45*	44*	50	44*	42*	52
32. Sew on buttons and do simple mending	46*	48*	48*	58	50	45*	56
33. Do simple alterations on one's clothes	36*	34*	40*	42*	36*	35*	48
Engage in Civic Activities (#7)							
34. Know basic laws and penalties for breaking the law	54	55	52	54	47*	48*	48
35. Know citizenship rights and responsibilities	50	52	48*	50	47*	45*	48*
36. Know how to register and to vote	39*	34*	44*	38*	36*	39*	41*
37. Know what to do when stopped by a policeman (rights and responsibilities)	39*	34*	44*	38*	33*	39*	33*
38. Know environmental/conservation issues	36*	31*	32*	31*	31*	32*	33*
Utilizing Recreation and Leisure (#8)							
39. Participate in group activities	71	69	64	73	72	68	74
40. Know activities and resources available	71	69	68	73	69	68	70
41. Understand value of recreation	61	62	56	65	61	58	59
42. Use recreational facilities in the community	64	62	64	69	64	61	63
43. Plan and choose activities according to interests	61	62	56	65	61	58	59
44. Plan vacations according to one's capabilities and time restrictions	36*	34*	36*	42*	36*	35*	37*
45. Demonstrate good sportsmanship	46*	45*	40*	50	44*	45*	41*
Getting Around the Community (Mobility) (#9)							
46. Know traffic rules and safety practices	46*	52	48*	58	53	45*	48*
47. Use various means of public transportation	61	62	60	69	67	58	67

	Cerebral Palsy	Epilepsy	Hearing Impairment	Mental Retardation	Multiple Handicap	Orthopedic Handicap	Visual Impairment
48. Drive a car, motorcycle or ride a bicycle	32*	31*	36*	35	28*	32*	33*
Achieve Self Awareness (#10)							
49. Know physical strengths and limits	79	83	72	81	69	74	74
50. Identify his/her interests and abilities	93	93	92	92	94	90	89
51. Recognize emotions in self and others	86	90	84	88	89	84	81
52. Identify his/her needs	86	86	84	85	89	84	81
53. Develop inner control as opposed to external or other control	79	83	76	85	81	77	74
54. Use his/her strengths to provide for other's needs (spouse, children)	64	66	60	69	61	61	67
55. Know his/her values	68	72	64	69	67	65	70
56. Recognize his/her own aging process and eventual death	50	55	56	54	47*	52	48*
Acquire Self-Confidence (#11)							
57. Feel worthwhile when he/she thinks about self	81	81	78	83	85	79	80
58. Know what others see in him/her	80	81	77	78	79	79	79
59. Accept praise	84	85	77	87	85	79	83
60. Accept criticism	84	85	77	87	85	79	83
61. Believe in self	82	83	80	85	86	81	81
62. Have a life plan	75	76	68	73	71	70	77
Achieving Socially Responsible Behavior (#12)							
63. Know rules and expectations of society	75	79	76	81	75	71	78
64. Behave in public in manner that does not cause problem for self	79	79	80	88	78	74	81
65. Demonstrate respect for rights of others	75	76	76	85	75	71	78
66. Know how to act in each of the various roles he/she plays (child, spouse, worker, etc.)	75	76	72	81	75	71	78

	Cerebral Palsy	Epilepsy	Hearing Impairment	Mental Retardation	Multiple Handicap	Orthopedic Handicap	Visual Impairment
Maintain Good Interpersonal Relationships (#13)							
67. Listen and respond to others attentatively	68	68	80	88	86	81	85
68. Make and maintain friendships with various kinds of people	79	83	72	85	81	74	78
69. Know sex role behavior	71	72	64	73	64	68	67
70. Possess a close sharing relationship with one or more persons	68	69	64	73	64	65	70
Achieving Independence and Interdependence (#14)							
71. Understand the impact of his/her behavior on others	75	79	76	81	78	71	78
72. Take charge of his/her own life	79	79	80	81	75	74	81
73. Accept responsibility for meeting goals	82	86	84	92	83	77	85
74. Strive to reach his/her potential	79	83	76	85	81	74	81
75. Respect needs of parents, spouse, children and close friends	75	83	72	85	78	71	78
76. Consider others needs when meeting his/her own	75	83	72	85	78	71	78
Achieve Problem-Solving Skills (#15)							
77. Identify bi-polar concepts such as good-bad	75	76	80	81	72	74	78
78. Understand the need for goals	82	86	80	85	78	77	85
79. Consider alternatives	79	83	80	81	81	77	81
80. Anticipate consequences of one's actions	82	86	84	88	86	81	85
81. Know where to find good advice	75	76	72	76	75	71	74
82. Make plans for future events (such as education of self and children, major purchases, etc.)	82	83	84	81	81	77	85

	Cerebral Palsy	Epilepsy	Hearing Impairment	Mental Retardation	Multiple Handicap	Orthopedic Handicap	Visual Impairment
Communicate Adequately With Others (#16)							
83. Recognize emergency situations	61	66	68	73	64	61	63
84. Read at level needed for future goals	68	66	72	69	64	65	67
85. Write at level needed for future goals	68	66	72	69	64	65	67
86. Speak, gestrue or use other methods of communication so that others communicate with him/her	64	66	72	73	69	65	67
87. Understand the subleties of communication	64	62	72	69	60	63	65
88. Know how and where to locate needed information	61	66	68	69	67	61	67
89. Assist family in learning to communicate feelings and meanings	57	59	64	65	61	58	59
OCCUPATIONAL SKILLS							
Know and Explore Occupational Possibilities (#17)							
90. Identify personal values met through work	74	79	76	84	76	69	76
91. Identify societal values met through work	75	79	76	85	77	70	77
92. Identify aspects of work related to pay (wage and salary)	82	86	84	85	77	77	81
93. Understand existence of certain occupational classifications	79	79	80	77	71	73	77
94. Identify occupational opportunities available locally	82	86	84	85	78	74	78
95. Identify sources of occupational information	82	86	84	85	78	74	78
Select and Plan Occupational Choices (#18)							
96. Identify major occupational needs	82	86	80	81	78	77	81
97. Identify major occupational interests	82	86	80	81	77	77	81

	Cerebral Palsy	Epilepsy	Hearing Impairment	Mental Retardation	Multiple Handicap	Orthopedic Handicap	Visual Impairment
98. Identify major occupational aptitudes	79	83	76	77	75	71	74
99. Identify requirements and demands of appropriate and available jobs	71	76	72	73	72	68	70
100. Make realistic occupational choices at all stages of adult life	71	72	72	69	69	67	69
101. Utilize past experience to locate occupations meeting current needs	71	72	72	69	69	68	70
102. Consider relationship of spouse's occupational role in relationship to his/her's	64	66	64	65	61	61	67
Exhibit Appropriate Work Habits and Behaviors (#19)							
103. Follow directions	89	93	88	96	86	84	93
104. Work with others cooperatively	86	90	84	92	83	81	89
105. Accept supervision/supervise others appropriately	82	86	84	92	81	77	85
106. Know importance of good attendance and punctuality	86	90	88	96	81	77	85
107. Use appropriate communications skills at work	86	90	88	96	81	77	85
108. Meet quality standards for work	79	83	80	85	75	71	78
109. Follow occupational safety rules and principles	79	83	80	88	78	71	78
Physical-Manual Skills (#20)							
110. Possess satisfactory balance and coordination for job chosen	64	69	64	73	69	61	67
111. Possess satisfactory dexterity for job chosen	64	66	64	73	67	61	67
112. Possess satisfactory stamina and endurance for job chosen	64	69	64	73	69	61	67
113. Possess satisfactory sensory discrimination for job chosen	64	66	64	73	67	61	67

	Cerebral Palsy	Epilepsy	Hearing Impairment	Mental Retardation	Multiple Handicap	Orthopedic Handicap	Visual Handicap
Seek, Secure, and Maintain Employment (#22)							
114. Search for a job using appropriate resources	79	83	80	81	78	74	81
115. Apply for a job including filling out application	79	83	80	81	78	74	81
116. Demonstrate good interviewing skills	75	79	76	77	75	71	78
117. Adjust to competitive standards (make production standards)	68	72	72	77	67	61	70
118. Seek help when things go wrong	86	90	84	92	81	77	85